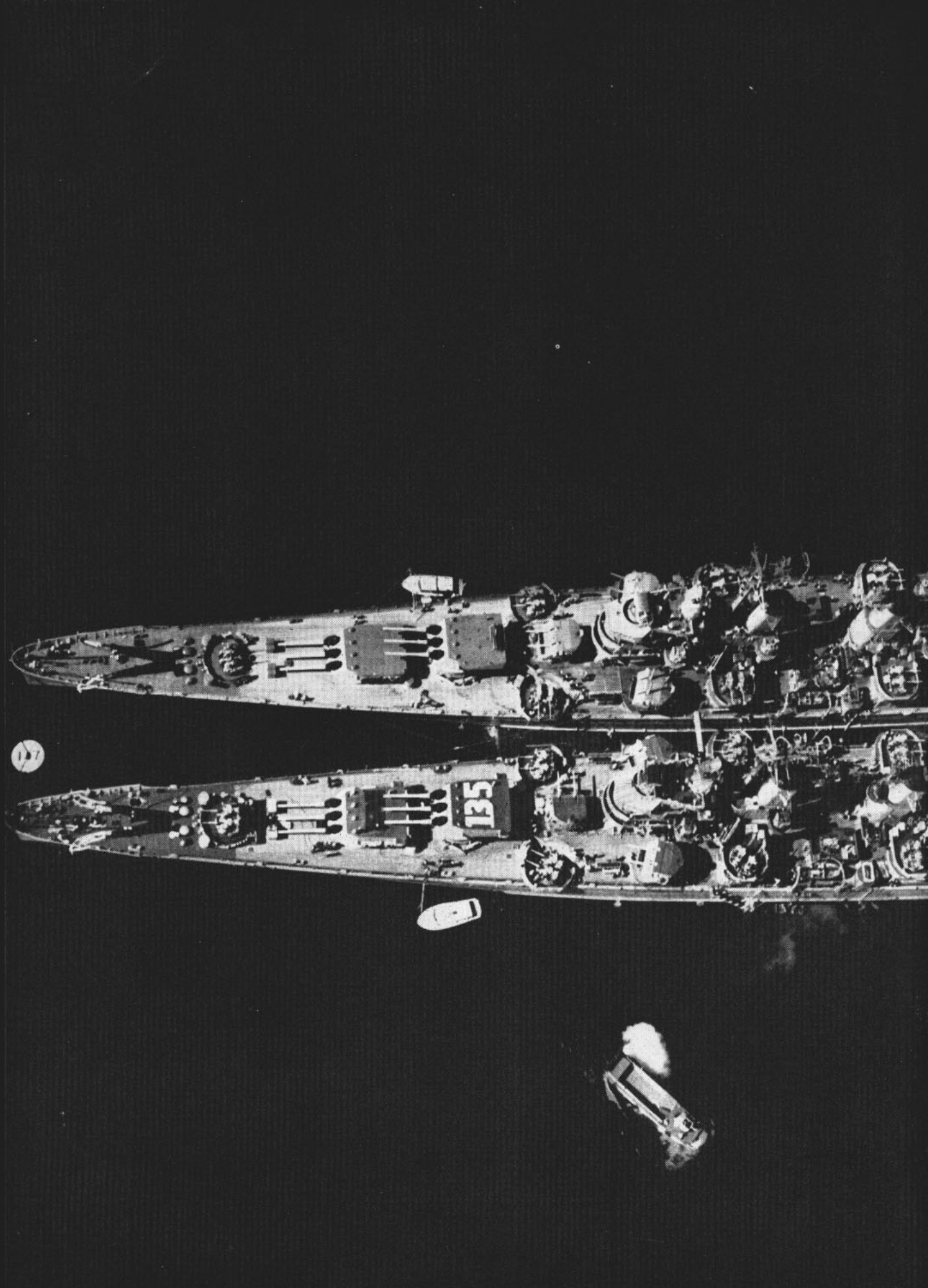
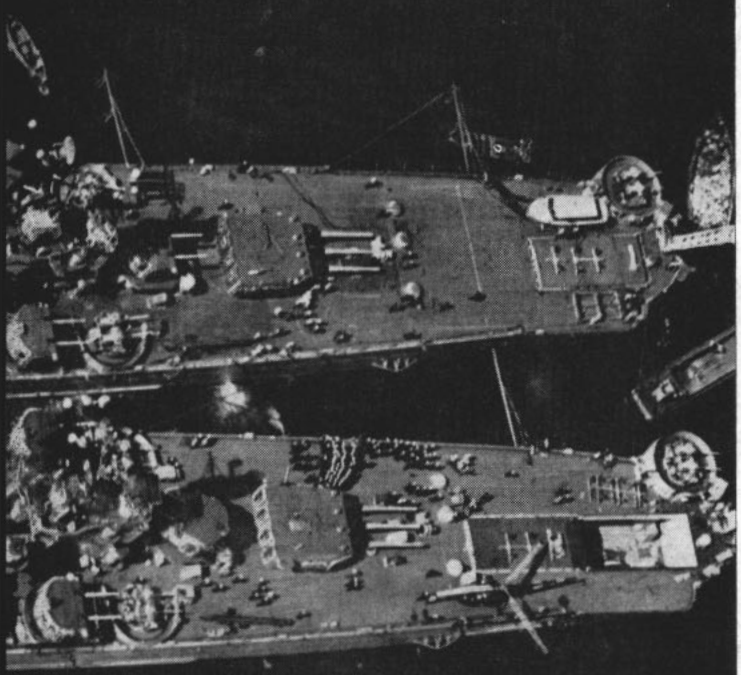
ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

This magazine is intended for 10 readers. All should see it as soon as possible. PASS THIS COPY ALONG

JULY 1954


135



ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

JULY 1954 Navpers-O NUMBER 449

TABLE OF CONTENTS

• **FRONT COVER: EVER CHANGING—and yet never changing—the sea is the constant companion of Navymen, Coast Guardsmen and merchant mariners. It's a 'friend' of many moods, from raging fury to rippling calm.**

• **AT LEFT: TWO OF A KIND—Twin heavy cruisers, *USS Toledo* (CA 133) (top) and *USS Los Angeles* (CA 135) swing on a buoy in Sasebo harbor, Japan.**

• **CREDITS: All photographs published in ALL HANDS are official Department of Defense Photos unless otherwise designated.**

Flag Hoists

'STARS AND STRIPES'—National ensign, flying from *USS Worcester* (CL 144), provides a symbolic frame for *USS Juneau* (CLAA 119) in the Mediterranean.

THE FLAGS THE NAVY USES—and it uses a lot of different kinds—are the colorful descendants of the banners of old.

Since early times people have displayed various kinds of objects to show their nationality or their allegiances.

The Aztecs, for example, carried fans made from the green feathers of a beautiful bird in a vivid display of their allegiance to that ancient nation.

One of the first true flags was the one carried by Roman cavalry. It was a square piece of fringed cloth hung on a crossbar at the end of a spear. The Romans also originated the custom of hanging flags of victorious battles in their temples, a practice that has continued down to modern times.

Toward the end of the Middle Ages, flags had become accepted symbols of nations, kings, organizations, cities and guilds of workmen.

Flags continue to designate special or official positions of authority, for example the royal standards of monarchies and flags such as the President's flag and the Secretary of Navy's flag in the U. S. There are also national flags—in the case of the U. S. it is the "Stars and Stripes" which stands as the emblem of all the people.

In addition to their symbolic role, flags have always played a prominent part in the field of communications. Roman soldiers signaled to one another from a distance of several miles by hanging cylinder-shaped devices and torches on a long rack. With this system the Romans were able to spell out detailed messages. For simple battle orders they placed shields and spears in various positions. Sometimes articles of clothing were hung on the spear points for added attraction and emphasis.

There are also records, going back to the year 1365, telling of three-masted rowing galleys of the Venetian Fleet which used signal flags and lighted lanterns to send simple orders between the ships. For example, a fleet commander had signals worked out which could change the formation of ships, tell them to get underway or notify them that an enemy was sighted.

During the late 1700s, oared galleys had been replaced by sailing ships that flew the Dutch, French, English, Spanish and other flags. Though the navies were new their signals were not unlike those used by the early Venetians. However, later in the 18th century the French and English navies started to use more flags. Soon detailed signal books to interpret their hoists were published.

By 1805, Admiral Horatio Nelson was able to send the message "England expects every man will do his duty." Although it took 11 separate hoists and 28 flags to send this message, all the ships of his fleet received it in good time.

By the end of the 19th century the use of semaphore and flag hoist signals had become a standard practice with most navies. Even today, with powerful radio transmitters sending messages around the world so fast that the U. S. Navy has instant contact with naval units everywhere, signal flags still fly from the halyards of Navy ships as their colorful designs flash technicolor messages back and forth across the seas.

To send these messages the Navy has 26 flags representing the letters of the alphabet, 10 numeral pennants and 10 numeral flags, four substitute flags and 18 special flags and pennants.

Using a combination of these flags, thousands of different messages have been worked out. A series of flags flying from the halyards can change the course of an entire fleet, cause hundreds of guns to be fired and thousands of men to man their battle stations. The wrong interpretation of a signal flag could mean disaster.

Since signal flags are used day after day—fair weather or foul—most ships carry spare flags to replace worn ones. However, some flags

Flash Messages in Color to the Fleets

are made aboard ship and for this purpose Navy ships carry bolts of white, blue, red, yellow and black bunting.

These five colors were selected for Navy flags because the human eye can distinguish them easily. Their exact color is taken from the Standard Color Card of America which is used as a guide by the textile industry to standardize various color shades.

Material can therefore be ordered from any textile concern with the assurance that it will not vary from the specified shade required by the Navy.

The majority of the signal flags used by the Navy are manufactured by private industry through Navy contracts.

These signal flags are made up in lots of hundreds or thousands depending upon the demand, and shipped to various distribution points throughout the U. S. where they are kept in stock to fill ship requirements.

Each flag has a permanent pattern which specifies its hoist and fly (length and width). The pattern also states exactly how much of the flag shall be a certain color and exactly where that color shall be used in relation to other colors used in the design.

The material commonly used to make signal flags is mercerized cotton bunting. Nylon bunting has been adopted for use in the manufacture of other flags formerly made of wool. Tests show that nylon is not only stronger but that it resists all weather. Nylon thread will also be used to sew the flags together because the thread must last as long as the fabric it holds together.

In addition to the signal flags there are also the special flags for the government and its various executive departments. Most of these special flags are made at the New York Naval Shipyard in Brooklyn, N. Y. There, in a building just inside the main gate at Sands Street, is the "flag loft."

Some designs for the special flags made at the Flag Loft call for as many as 15 different colors. Each time a new color is used, the sewing machine must be re-threaded and the tracing of the pattern begins all over again. It usually takes about 36 hours to make one of these elaborate flags.

Special embroidered flags such as the President's flag are usually done by hand or on the appliqueing machine and take longer to complete than those done on an ordinary sewing machine.

The President's flag is one of the finest flags turned out by the Flag Loft at Brooklyn. His personal seal appears on a blue field surrounded by a circle of 48 stars. Within the circle an American eagle turns its head toward its right talon which holds the olive branch of Peace. The left talon of the eagle holds the 13 arrows symbolic of War. In the eagle's beak is a white scroll inscribed *E Pluribus Unum* ("One out of many").

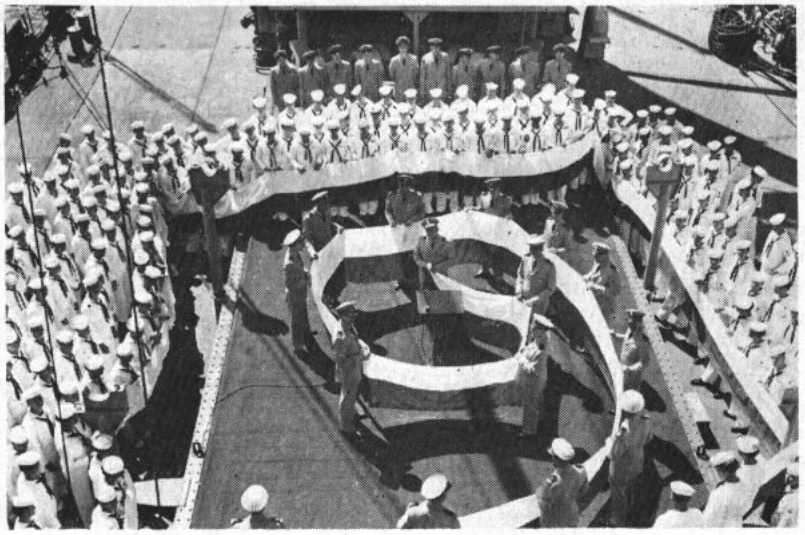
It is interesting to note that both the seal and the flag were redesigned in 1945, on executive order of the President, so that the American eagle would be facing the olive branch of Peace. Formerly the eagle in both the seal and the flag faced left.

Other special flags made by the Brooklyn loft are those for the Secretary of Defense, the Secretary of the Navy, the various bureaus of the Navy and personal flags of high ranking admirals.

There are about 65 steps in the manufacture of a typical departmental flag. It takes from 30 to 40 hours to complete, depending upon its size. An admiral's flag, which requires sewing stars back-to-back on the navy blue background, takes about four hours.

The most familiar of all the flags that fly from Navy ships and stations

BREEZE whips signal flags as bunting is aired. Long in use, signal flags can change course of an entire fleet, help win battles, avoid disasters.



SIGNAL PENNANT is sent aloft by QM. Right: 'Welcome Home' banner is unwound on board *USS Jupiter* (AVS 8).

is the national ensign. Manufactured on a large scale now by private industry, the "Stars and Stripes" is also somewhat tricky to make.

Each of the red and white stripes must be exactly the same width and the seams must be perfectly straight. The stars in the upper left hand corner take more time than any step in the procedure.

First, they are cut out and placed back to back on the blue field and then sewed simultaneously with a rapid back and forth movement of the sewing machine.

Although the basic design of "Old Glory" has changed since the Continental Congress got together on 14 Jun 1777 and decided on the pattern of our first flag, many of the original concepts remain the same. For example, the stars still appear in the upper left-hand side (or the "West" side) of the flag because they represented a new "constellation" of States rising in the West.

The blue in the field was taken from a Scotch banner that signified the virtues of vigilance, perseverance and justice. The red color, which in Roman days was the signal of defiance, denotes daring; the white, purity. The 13 stripes represent the original United Colonies of 1777.

The stars represent the number of states in the Union. Although there is no law that states that any certain star should represent a particular state, it is a popular opinion that beginning in the upper left hand corner of the field and numbering across, each star stands for a state in the order of its entrance into the Union.

For example, since Michigan was the 26th State to enter the Union, the 26th star on the flag would represent the "Wolverine State" (2nd star from the left in the 4th row).

With the knowledge of all this it is no wonder that all "flag makers" are a proud lot. The special flags they turn out represent outstanding personalities. The signal flags made by their hands could conceivably mean the winning or losing of a battle. The Stars and Stripes made on their machines will fly from the ships and stations of the world's largest Navy. The art of making flags is truly an honored profession.

—Fred Doby, JO1, USN, Third ND.

INCOMING LST is guided to beaching position by semaphore signals during World War II amphibious operation.

Liberty in the Alps

SAILORS from USS *Pittsburgh* (CA 72) journeyed to Switzerland not long ago, while their vessel was visiting in Genoa, Italy.

The junketing Navymen made their "headquarters" in Lucerne, traveling to nearby Mt. Pilatus to try their luck at skiing and to Berne, Switzerland's capital, for a glimpse of world organizations at work.

One of the most scenic countries in the world, Switzerland is noted for its towering Alps, centers for winter sports and mountain climbing. Among its best-known products are watches and high precision equipment. Quaint chalets add to the "old world" charm and atmosphere abounding in this land of master craftsmen and international good will.

Top of page: A hill overlooking Lucerne affords a fine opportunity for visiting bluejackets to photograph Switzerland's scenic beauty. *Right center*: Swiss chalet, now converted into a restaurant, attracts this trio of sailors. *Lower right*: 'Crest' made of skis points way to six ski trails. *Lower left*: Sailor views Mt. Pilatus, a favorite amongs skiers.

—Robert D. Barnard, JO2, USN, USS *Pittsburgh*

THE WORD

Frank, Authentic Advance Information On Policy—Straight From Headquarters

• **CHANGE IN RATING** — Certain personnel in Group IX aviation ratings in pay grades E-5 and above may now request a change in rating to aviation electronics technician (AT), aviation fire control technician (AQ) or aviation guided missileman (GF).

This program is in line with the Navy's need for more skilled enlisted technicians in the field of electronics. Earlier, a similar program (see May 1954 ALL HANDS, p. 48) made it possible for men in various ratings to change their rating to FT and ET.

Personnel whose requests are approved under the new program will be assigned training to qualify them for the change of rating. The training program will qualify them to perform duties, in equal pay grade, in the rating to which the change is being made.

Following successful completion of this training the ratings of graduates will immediately be changed to their new rating of AT, AQ or GF.

While undergoing training, personnel may still qualify for advancement in the rating held and such advancement will be affected in all cases where the authorization is received prior to the date of change to new rating.

Eligible for the program are USN personnel in Group IX ratings who have decided to make the Navy a career. They must be in pay grades E-5 or above in one of the following ratings: AD, AO, AC, AB, AM, AK, and PH. In addition PRCs may apply but other personnel in that rating are ineligible. Personnel carrying special program codes (9900 series) may submit a request, but the service requirements for their specialty may preclude selection.

A minimum of four and a maximum of 12 years' active service is mandatory, along with a requirement of five years' obligated service. Minimum test scores of 110 on the combined GCT and ARI tests and 50 on the MECH or MK ELECT test must be met. Quarterly marks must average 3.5 or higher in proficiency in rating as a petty officer.

Personnel meeting all requirements and who are interested in submitting a request should check BuPers Inst. 1440.13 for further information.

• **AWARDS WAITING** — Are you a "Jonah's Jaybird?" If you are, the Navy's Office of Information, Navy Department has a "certificate" waiting for you.

One of many unique but unofficial certificates, the "Jaybird" one is individually prepared and suitable for framing. It commemorates the rescue of Navy, Marine or Army Air Corps personnel by submarines off the coast of Japan during World War II.

The Submarine Lifeguard League, in cooperation with Army and Navy aircraft, rescued 504 downed American fliers from enemy waters and beaches during the war. Personnel participating in the rescues are entitled to the certificate. Each certificate has been signed by Vice Admiral Charles A. Lockwood, USN, wartime ComSubPac.

Any Navyman who believes himself eligible for the award should write to the Chief of Information, Navy Department, Washington 25, D. C., giving his name, rank at the time of rescue, the unit to which attached, the approximate date of the rescue and the name of the submarine. The certificate will be forwarded without charge.

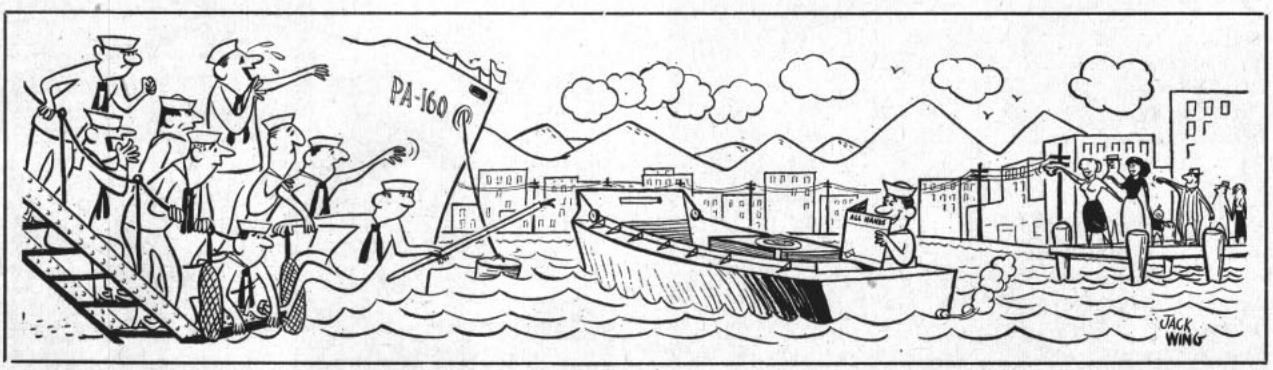
• **DEPENDENTS I.D. Card**—A new, all-purpose "military Dependents Identification Card" (DD Form 720) has been established for dependents of Navy, Marine Corps, Coast Guard and Air Force Personnel. This card will be used by authorized dependents for identification at commissary stores, exchanges, medical services, special services and similar activities.

Non-appropriated funds activities, such as clubs, golf courses, swimming pools, which currently require varying types of identification cards are directed to make all practicable use of the new I.D. card.

History of the single identification card dates back for more than a year and a half when the Navy and Air Force jointly made a study into the complexity of base identification systems. It was discovered that large installations might often require an officer or enlisted man and his wife to carry as many as 20 to 30 identification cards between them. This new I.D. card will be recognized by commands of the Navy, Marine Corps, Air Force and Coast Guard.

It should be noted, however, that this card does not in itself, authorize entry into any classified security area and is not intended to replace any security system now in effect, or to be placed in effect in the future.

BuSandA, through the issuance of SecNav Inst. 1700.1, has promulgated instructions governing the administration of the Military Depend-



PASS THIS COPY ALONG—Cox'n, make gangway! Don't leave nine other men stranded without seeing ALL HANDS.

ents Identification Card. BuPers, BuMed and the Marine Corps coordinated in formulating the identification system. The card is authorized for issuance to eligible dependents of U.S. Navy and Marine Corps personnel on active duty (in excess of 60 days) and to dependents of Navy and Marine Corps retired and Fleet Reserve retired personnel.

The term "dependent," for the purpose of this card, is defined as follows: a lawful wife; a lawful husband, provided such husband is in fact dependent upon his service wife for over one-half of his support; children who are legitimate, unmarried, between the ages of 16 and 20; stepchildren or adopted children, unmarried, between the ages of 16 and 20; children who are legitimate, unmarried, and over 21 years of age, provided such children are incapable of self-support because of mental or physical disability, and are in fact dependent on the serviceman for one-half of their support; or parents, including father, mother, stepparents, and parents by adoption, who are in fact dependent for more than one-half of their support.

Commanding officers at Navy and Marine Corps activities are authorized to issue the dependents' I.D. card. Applications for the new card will be made in duplicate on DD Form 719.

Complete details on regulations governing the application for and use of the Military Dependents Identification Card are contained in SecNav Inst. 1700.1 of 30 Mar 1954.

• **DEADLINE FOR POW CLAIMS**—Navymen interned as prisoners of war during World War II have been given until 1 Aug 1954 to file certain prisoner of war claims.

The deadline for Public Law 303 (82nd Congress) has been extended from 9 Apr 1953 to 1 Aug 1954. This law is an amendment to the War Claims Act of 1948 and provides compensation at the rate of $1.50 a day for each day members of the armed forces of the U. S. were subjected to forced labor and/or inhumane treatment during World War II, in violation of the provisions of the Geneva Convention of 1929.

Generally, claims of this type relate to POWs who were required by enemy governments to work excessive hours under unsafe conditions and without proper compensation, and who were subjected to abuse by their captors and were not furnished adequate housing and sanitary facilities.

Ex-POWs who have already filed their claim do not need to file again. The extension of the law does not create any new benefits but merely enables every eligible claimant or survivor who failed to file before the April 1953 deadline to exercise his rights under the law.

Claim forms are being mailed directly by the War Claims Commission to the last known address of veterans eligible for this compensation who have not filed before. The forms are also available at Veterans Affairs offices in your state.

The WCC is requesting that all claim applications be air mailed to the office of the War Claims Commission, Washington 25, D. C., to expedite settlement.

• **TIME LIMIT**—SecNav Inst. 1650.4 sets a time limit upon the recommendation for and award of certain decorations.

Except in time of war or national emergency, or during such time as these limits may be legally extended, recommendations for the award of the Legion of Merit, Bronze Star Medal, Air Medal, Letter of Commendation (with ribbon), Presidential Unit Citation or Navy Unit Commendation must be submitted within three years and the award must be made within five years of the date of the act or service.

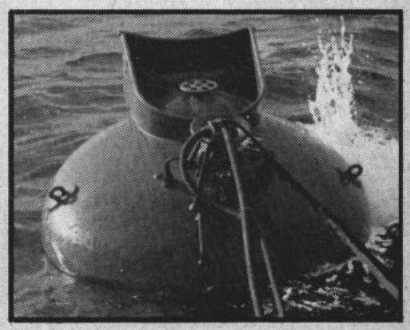
At present, recommendations for award of the Medal of Honor, Navy Cross, Distinguished Service Medal, Silver Star Medal, and the Navy and Marine Corps Medal must be submitted within three years and the award must be made within five years of the act or service. There are no time limits on the Purple Heart.

Recommendations for the Distinguished Flying Cross must be initiated within two years, and the award must be made within three years of the date of the act or service.

In the case where a recommendation for any of the above has been initiated and placed in official channels within the prescribed time limits but has become lost, the certificate of an officer to that effect, accompanied by a copy of the recommendation or a statement of the substance of the original recommendation, may be accepted. For details see the SecNav Instruction.

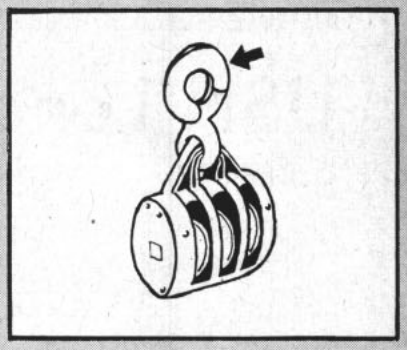
QUIZ AWEIGH

Check your score and see how you rate with your shipmates on this month's quiz? Use this scale: 6 correct, 4.0; 5 correct, Very good; 4 correct, Fair; 3 correct, Guess again.



1. Of great importance in submarine rescue operations is this (a) diver's rig, (b) "false seat" device, (c) rescue chamber.

2. Using this device, (a) 6, (b) 11, (c) 15 persons can normally be rescued at one time.



3. If you have ever done any cargo handling, you probably have come across this (a) trolley block (b) clump block, (c) treble tackle block.

4. The arrow points to the (a) sister hook, (b) disk bearing releasing hook, (c) swivel eye.

5. Above is the Navy's (a) FH–1, (b) F3H–1N, (c) F2H–3.

6. The official name for this all-weather fighter is the (a) *Phantom*, (b) *Demon*, (c) *Banshee*.

ANSWERS TO QUIZ ON PAGE 55

INSTRUMENT check on PT boat is made by ROK Navy officers under direction of instructor Calvert A. Posey, ENC, USN.

USN Lends Helping Hand to ROKN

BUILDING A NAVY is like brewing a good pot of coffee—they both take know-how and the proper ingredients, plus plenty of time to boil. The Republic of Korea lacked time to boil their Navy but they have come up with an instant recipe for building a Navy that has given definite results.

When World War II and the Japanese occupation of Korea ended there were no trained officers or enlisted men, no ships or anything that resembled a Navy in the entire country. Now, less than nine years later, the Republic of Korea has a Naval Academy that could pass as a "pocket edition" of Annapolis; a top notch recruit training center; service schools to give training in various phases of modern warfare and a fast growing fleet of ships, many of which have already proved themselves in combat.

The situation looked pretty bleak back in 1946 when the first Americans went into Korea to lend a helping hand. But, what they saw in the determined faces of the men they talked with convinced the Americans that someday they would see Korea with a small but efficient fleet. Time has proved them right.

In those early days, what is now the ROK Navy became a Coast Guard, with eight officers and seven enlisted men of the U. S. Coast Guard serving as advisers. Since they were called to Korea without any advance notice or preparation, things were rather mixed up for a short time. The language barrier presented the biggest hurdle at first, but a little ingenuity in sign language and a sense of humor helped both sides.

Training, not on a large basis but rather for the selected few who were best fitted to pass on the knowledge to others, started almost immediately after the Americans arrived. Before the training program got well under way, four 300-ton former Japanese mine planters were delivered to the republic and the Korean Coast Guard was fast becoming a thing of reality. Shortly afterwards four U. S. LCIs were turned over to the Koreans.

During that same time the Koreans were also busy establishing a communication net between the principal cities where naval bases were to be located. The equipment was borrowed from the Army, salvaged from old Japanese equipment left from World War II and mixed together with a prayer. It worked.

The biggest step forward in the program of building up Korea's sea forces came in February of 1947 when, at a colorful ceremony attended by almost every high ranking Korean and American in the area, the Academy at Chinhae was opened with the induction of eighty midshipmen.

Little more than a year later the Republic of Korea was established and recognized by the nations of the world. Officials decided to turn the Coast Guard into a Navy. The U. S. Coast Guard personnel returned to Japan and a team of American Navymen took over as advisers.

From that day to this the ROK Navy has been constantly on the move, growing and improving beyond the hopes of those early dreams. Center of both the growth and improvement has been the formerly little known city of Chinhae, which combines the Korean equivalent of San Diego, Norfolk and Annapolis all in one spot.

During World War II the Japanese built up the city, using it as a naval and seaplane base. Its existence was a highly guarded secret.

In contrast to that earlier secrecy, Chinhae today is fast becoming the best known city in Korea. Prime reason for this is the Naval Academy. Each year 100 young naval officers are graduating from the school and loudly sing its praises. These young men receive the same basic course and methods of teaching as those used at the U. S. Naval Academy.

American Navymen and many of the Koreans have tagged the school "little Annapolis," but there is not much physical resemblance. Bare classrooms in old Japanese seaplane hangars contrast very sharply with the modern educational plant on the banks of the Severn, but the same spirit is there.

It's no easy berth for the students; they average 18 hours' work a day. Part of the time is spent in classrooms, the rest on drill fields gaining practical experience in various subjects. At first the students had the added burden of translating into Korean all the texts to be used. This was necessary so that those who followed would be able to study in their native language.

Since the texts were the same as those used at Annapolis, it's possible to get some idea of the tremendous task they had before them. Most of the texts are concerned with highly technical subjects such as electronics, international law, gunnery, engineering and of course naval warfare.

Officials estimated that it took close to 45 days to turn out 150 translated pages. Then came careful checks by others to insure that everything was correct. Finally the material would be referred to the department concerned to insure that none of the technical meaning had been lost or changed.

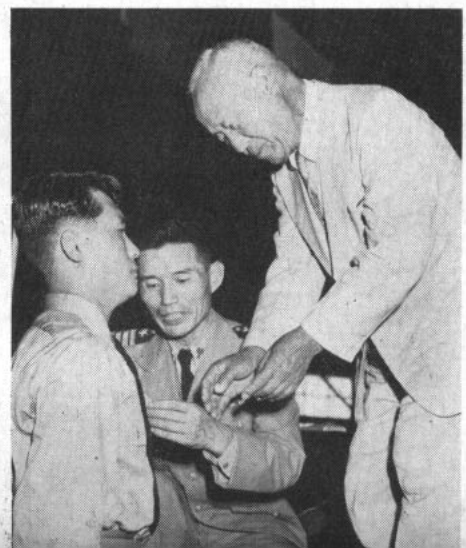
Like every other problem that has come up during the few short years the Korean Navy has been in existence, the translation problem was met head on and overcome. But, many a night, middies, instructors and the American advisers kept their lights on long after taps, making sure that every detail checked out just right.

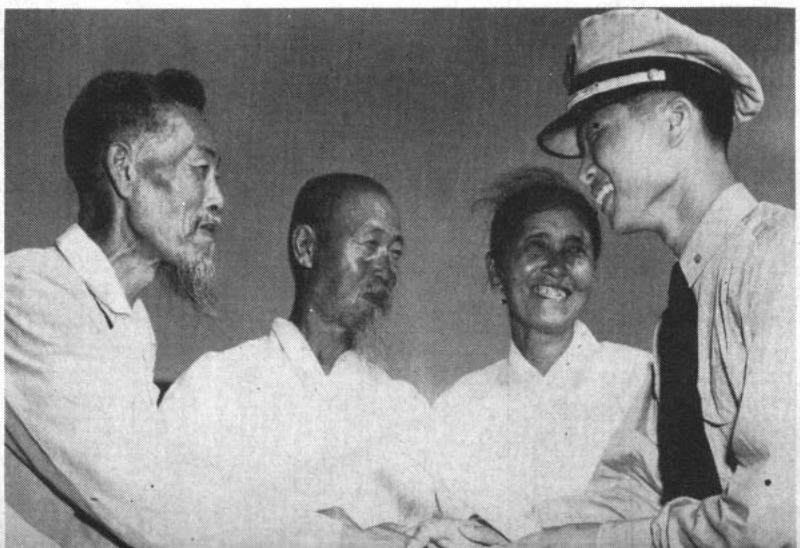
Many of those early students are back at the Academy now as instructors. A little older, a little more experienced and with long days of combat patrols under their belts, they are now dishing it out to the men who have followed in their footsteps. Other instructors come from the many universities and colleges which were put out of commission during the long fight in Korea.

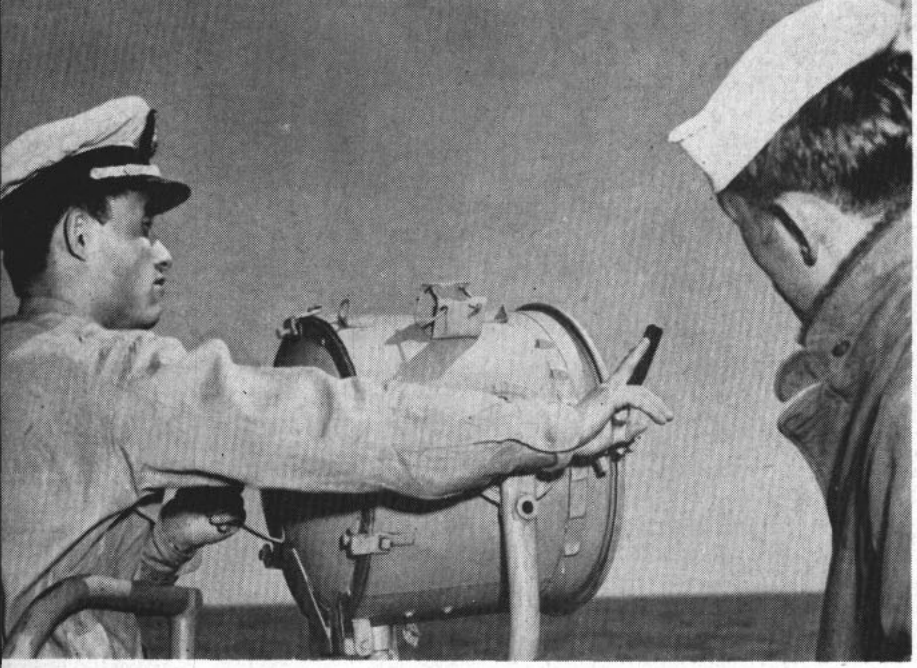
One problem which has never confronted officials in their struggle to build up the Navy is the prob-

ROK NAVYMEN learn two codes—Korean Morse and International Morse—at radio school. Lawrence McDonald, RMC, USN, supervises class of seamen.

ROK President Syngman Rhee presents ensign's bars to graduate. Right: Korean family congratulates officer son.







ON THE BRIDGE of *USS Bradford* (DD 545), an ensign in the ROK Navy gets practice on signal light. Standing by to assist is Walter Simao, SN, USN.

lem of personnel. The youth of the country have been raising their right hands in droves. In one year there were more than 3000 applicants for the 100 openings at the Naval Academy.

Applications for enlistment have been just as high and as a result each enlistee must pass a special examination before being accepted. Once accepted, the enlisted man is sent to the Recruit Center at Chinhae.

Life at the recruit center is just as rough as that at the ROK Naval Academy; however, the course is only 13 weeks. Since the birth of the Navy the number of enlistees has far outstripped its housing quarters and the young men find themselves living a rugged life in barracks that had been warehouses.

In the classrooms the American Navy again provided the pattern. The texts are the same and the entire program follows training methods used at NTC Great Lakes.

Just as in America, the ROK Navy's "boot camp" consists of general indoctrination into the workings of seamanship, gunnery and general military training. The "bible" for the recruits is the old familiar *Bluejackets Manual,* translated into Korean.

The top men in each recruit class move across the road for further training in one of the service schools while the remainder are assigned ships and stations until they meet the standards needed to enter one of the several specialist's schools.

Like their counterparts in the U. S., the "boots" are classified according to their scores on a battery of tests. These tests indicate the school they are best fitted for and whether it be radar, sonar, administration or any of the other skills, they enter with a desire to learn that has amazed observers.

These schools were just getting started good when the Korean war began, but the results of the training were shown on the second day of the war.

On 26 June 1950, just one day after the North Koreans invaded the southern half of the country, a PC manned by Korean Navymen spotted a transport full of enemy soldiers. The enemy was heading for the vital port of Pusan.

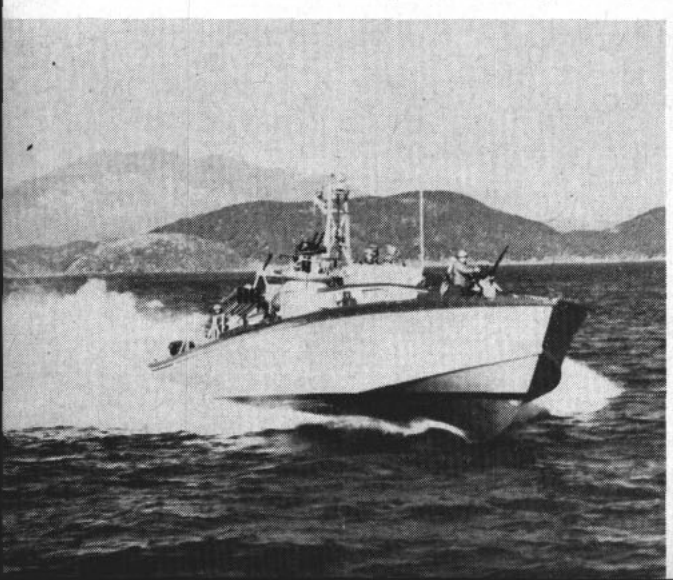
The transport and her cargo had been sent south for a surprise invasion of Pusan but in a night-long battle the PC sent her to the bottom, wiping out the threat and 1000 North Korean soldiers.

That engagement marked first blood for the young ROK Navy and cheered the whole country. Throughout the rest of the war the Koreans proved over and over that they had a Navy they could be proud of. Several ships were sunk by mines and others blasted by shore batteries, but in each instance the men of the ROK Navy only shook their heads and came back for more.

Many of the South Korean officers and men gave valuable assistance to American ships taking part in the fighting. Sent aboard for instruction they proved invaluable in many instances, supplying information about the channels, targets on the beach and acting as interpreters. In addition they stood regular watches and often took part in the actual bombardment of the enemy.

It was during the war that a new

AMERICAN-MADE PT boat is put through its paces by ROK sailors. Right: ROK midshipmen undergo physical conditioning.



training program began, one that has contributed much to the growth of the ROK Navy. In small groups and then in ever growing increments, the government started sending hand-picked officers and men to the U.S. They attend various service schools, spend time in Bureaus and Departments and bring back the knowledge they acquired.

San Diego, Washington, Great Lakes, Norfolk and practically every large naval installation have become familiar with the Korean Navyman. Despite a language barrier they hold their own in classes with American sailors.

When their training is finished these men return to Korea to serve as instructors or in administrative positions where their new knowledge can be given to others. Some go to the shipyard at Chinhae where, with outmoded equipment but up-to-date ideas, work of good quality is being turned out. Doctors trained at Bethesda are either at the various naval bases or in the big hospital at Chinhae which, operating under conditions of handicap due to shortage of proper equipment and space, has performed wonders in treating the wounded from the war.

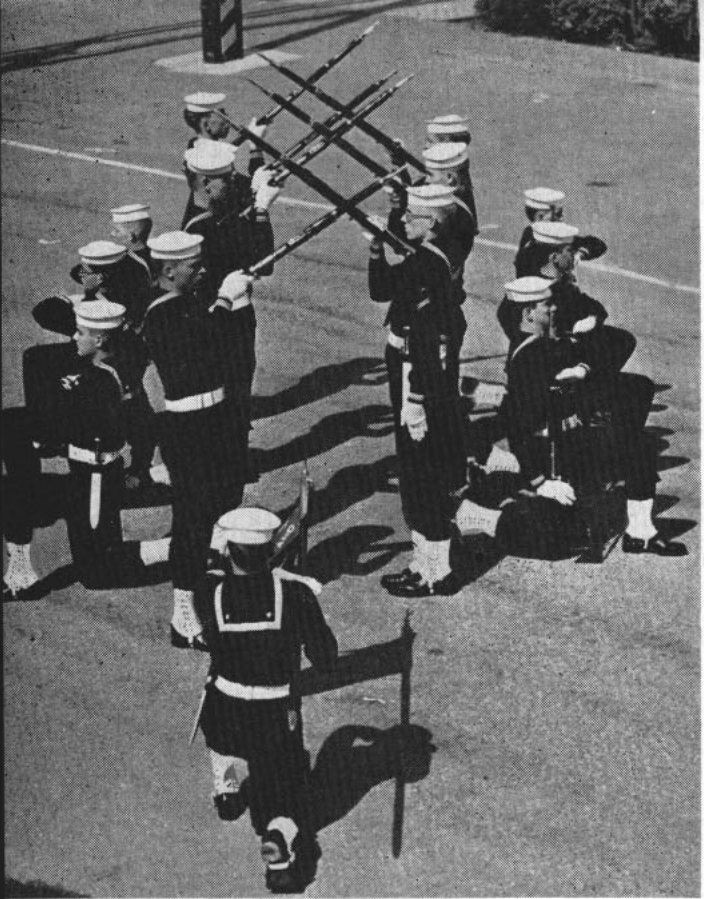
The compact ROK Navy is doing a top notch job—a job which usually requires many more years. Its ships and crews represent a Navy that was born in the aftermath of World War II, grew to adolescence in the Korean war and is just now emerging into the early stages of manhood. If the officers and men have anything to say about it, the ROK Navy will shortly rank near the top in fighting qualities and esprit de corps.

—Bob Ohl, JO1, USN.

HEADQUARTERS for ROK Navy service schools resembles college campus. Below: fire fighting is taught in Damage Control class by K. M. Crain, DCW2, USN.

CEREMONIES mark transfer of USS *LSSL 85* (left) and PT boats to Republic of Korea Navy. Transfers took place in Japan.

Naval Drill Team



INTRICATE MANEUVERS like this win trophies for drill team. Below: Men look smart 'going off in all directions.'

WHILE THE LINES of the old military ballad claim that none can compare with the high-stepping "Grenadier," there's a naval drill team on the U. S. West Coast which stands ready to refute this conclusion at the blast of the drillmaster's whistle.

For snap, discipline, and precision, the drill team of the Electronics School at Treasure Island, San Francisco, is difficult to beat, as the shiny glass case full of trophies the team has won over the past six years proves. Take a look at these pictures and you'll be inclined to agree. When it comes to intricate and unusual parade routines, "This outfit is unsurpassed," says the team's current drillmaster Clarence Blackwell, SN, of Pensacola, Fla.

The Officer-in-Charge of the School's Barracks backs this statement and adds his own challenge of competition to any military drill team, locally or in other naval districts. (For another top drill team see page 37 of this issue and ALL HANDS October 1953, p. 8).

Aside from its value to the Navy, the naval drill team has public relations appeal. In fact, it was because of local public interest in the Navy that the Electronics School team was first conceived and organized in the fall of 1947. The drill team appeared on several occasions and made a good impression. But it was some time before it started winning trophies. Then, in 1949, A. E. Owens, Chief Torpedoman, at the time CPO in Charge, Schools Barracks, received permission to organize a military drill team. Its ambition was to become the best team in the state.

The first call for volunteers brought 90 men, but after two weeks of intensive drilling, following school hours, the number had dwindled to 36. "It was this group of 36 which formed the nucleus of our present team," the O-in-C explained. Since then, a number of equally salty chief petty officers have volunteered their services.

At present, they learn the fine points of competitive

DRILL TEAM at Electronics School, Treasure Island, won

Takes the Trophies

drill from T. B. Combs, a chief boatswain's mate of 18 years' service. Today, after almost six years of spirited competition, in which they claim to have defeated every other major drill team in the state, recruiting new team members offers no problem. It was this spirit that won the Electronics School the coveted State Drill Team Championship three years in succession, in 1951, 1952, and 1953.

In October of 1953, all 24 members of the team performed at the Texas State Fair and took part in the subsequent Parade festivities there.

The basic job at the Treasure Island school is training electronics technicians to service the forces afloat, but as a spare time activity the military drill team is popular with both the men and the Navy.

The team members are students chosen from an already select group. In order to enter the school in the first place, it is necessary to have a combined GCT and Mathematics score of 115. Once admitted, only the men with the highest grades are allowed to try out for the team. A neophyte, for example, must practice for two weeks before even being judged for membership on the team. Those who do make it are not excused from any of the academic studies and must keep up their grades to stay.

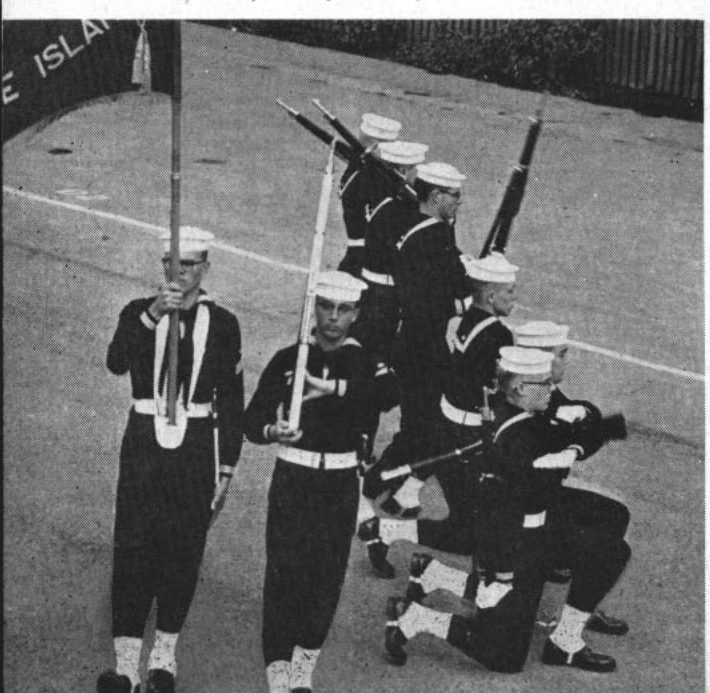
The men give their own free time to drill, elect their own drillmaster, and ballot as well on which competitions they wish to enter. They sandwich in their drill periods late in the afternoon in a work-and-study day which gets underway at 0530. After drill, they busy themselves ironing uniforms, nailing marching cleats onto the heels of their shoes, and cleaning or shining rifles, bayonets and web belts.

The spirit of competition and self-development on the drill field pays off, not only there, but also in the men's efficiency, appearance and aptitude.

LT David P. Marin, USNR

SNAP, precision and discipline are drill team's 'trademarks.' Below: Team practices another of its maneuvers.

California state championship three years in succession.



Waves' 'Gold Hash Mark' Anniversary

THIS MONTH MARKS an important milestone for women of the U. S. Navy—it is their "Gold Hash Mark" anniversary.

Twelve years ago the Waves started out as a small group of patriotic women who volunteered their service to the Navy in World War II. Originally it was proposed to recruit only 10,000 Waves, but by the end of the first year their strength had already more than doubled. They reached their numerical peak in July 1945 when there were approximately 90,000 officers and enlisted women on active duty, serving at naval activities in the U. S. and Hawaii.

Waves performed nearly every type of duty ashore, including those of gunnery instructor, ballistics expert, navigation instructor and as skilled technical workers as well as yeoman, storekeeper, hospital corpsman and others.

Women officers served as lawyers, civil engineers, doctors, linguists and educators.

The outstanding record established by the Waves in World War II paved the way for the passage in June 1948 of the "Women's Armed Services Integration Act" which made women a permanent part of the Regular Navy. The new law gave women a chance to make the Navy their career.

Today the Waves are an integral part of the service. Although their numerical strength has been reduced since World War II, their importance has not changed.

These Waves will form the nucleus of any expanded force that might be needed in the event of a future emergency. Should the call come, they are the ones who will be delegated to train other women to relieve the men needed for duty with the Fleet.

The job of the Waves today is a far cry from that of the "Yeoman (F)" of World War I whose work was mostly stenographic. Their duties in the naval service were greatly increased during World War II. In the Korean fighting Waves once again demonstrated their value in an emergency, when women were recalled to active duty in the naval service both voluntarily and involuntarily.

Enlisted Waves today fill 27 of the Navy's 64 general service ratings. Officer and enlisted women are serving not only in the U. S., but also in overseas duty billets in England, France, Norway, Germany, Italy, Japan, Guam, Hawaii, Alaska, Puerto Rico and Newfoundland.

Who are some of the women who make up today's career force? How has their own training prepared them to take over the responsibilities which they now have and greater responsibilities which could be theirs tomorrow?

This is to introduce several of them, all of whom will be in the first group to complete their first 12 years of service this fall.

GOING REGULAR—Wave Reservist Mary Saltsman, SK1, was ordered back to active duty. Deciding on Navy as a career, she later 'signed up for six.'

• Margaret Alice Gay, SKC, USN, will be among the first to be eligible to enter the ranks of the "Gold Hash Mark" Waves on 1 October. Chief Gay is now on duty at U. S. Naval Training Center, Bainbridge, Md. She attended Storekeeper School at Bloomington, Indiana, in one of the first classes held at that school. Her home is in Auburn, Mass., and her duty has taken her to Cleveland, Ohio; Boston, Mass.; and Pearl Harbor, T. H. While on duty as Chief Master-at-Arms in the Waves Barracks at the Naval Receiving Station, Pearl Harbor, T. H., she received a letter of commendation from her C. O. for outstanding service.

• Rita Delia Roche, TEC, USN, at U. S. Naval Communication Station, New Orleans, La., celebrates her 12 years of Naval service on 2 October. She attended one of the first classes at the Yeoman School, Stillwater, Okla. Most of the duty of Chief Teleman Roche has been in the Mardi Gras town of New Orleans, La. She has also served in New York City and Washington, D. C.

• Angelina Margaret DeLeo, YNC, USN, on duty as an instructor in recruit training at U. S. Naval Training Center, Bainbridge, Md.,

LTJG Katherine Keating, MSC, USN, was once Wave radioman. Right: Janice Vaughn, SA, USN, renders snappy salute.

will be eligible for her gold marks on 6 October. She also attended Yeoman School at Stillwater, Okla., as well as Instructor School at U. S. Naval Receiving Station, Norfolk, Va. Chief DeLeo's home is Belmont, Mass. She has served at Washington, D. C., and Pearl Harbor, T. H. She received a letter of commendation for outstanding services from the Commandant of the Fourteenth Naval District.

• Kathryn Mary Smith, SKC, USN, will add her third hash mark on 8 October. Currently on duty at U. S. Naval Training Center, Bainbridge, Md., Chief Smith attended Storekeeper School at Bloomington, Indiana, and was an instructor at Wave Recruit Training Center, Great Lakes, Ill. Her home is in Philadelphia, Pa. She served at Cleveland, Ohio, during World War II and later at U. S. Naval Auxiliary Air Station, Whiting Field, Milton, Fla.; and U. S. Naval Air Station, Pensacola, Fla.

• Sallie Miller, RMC, USN, will celebrate her 12th anniversary with the Waves on 10 October. She is on duty at U. S. Naval Air Station, Anacostia, D. C. Her home is in Colorado City, Texas. Chief Miller went through recruit training and Radio School at the University of Wisconsin, Madison, Wisconsin. Like many of her gold-hash-mark sisters, she has had duty in Hawaii, at the U. S. Naval Communication Station, Pearl Harbor, T. H.

• Alice Grace Evans, YNC, USN, on duty at U. S. Naval Training Center, Great Lakes, Ill., will also add another to her four-year stripes on 6 October. She attended Yeoman School at Stillwater Okla. Chief Evans, whose home is in Portland, Oregon, has been on duty at U. S. Naval Air Station, Los Alamitos, Calif.; NAS, Glenview, Ill.; Pasco, Washington; Kansas City, Kansas; and Seattle, Washington.

• Agnes McSkimming, SKC, USN, will celebrate her 12 years on 8 October. She attended Storekeeper School at Bloomington, Indiana. Chief McSkimming's home is in Brooklyn, New York. She is on duty at Staff Headquarters, 14th Naval District and Hawaiian Sea Frontier.

THREE WAVES soon to wear gold hash marks: Margaret A. Gay, SKC, (left), puts uniform in shape. Sallie Miller, RMC, another old-timer, (left center), checks quarters with Ruth Osgood, TE1. Alice Evans, YNC, completes 'paperwork.'

TRAVELING WAVES—Two Navywomen pack up for trip to Hawaii. Right: Sights of San Francisco attract this Wave.

However, next month she is scheduled to report to Service School Command, Naval Training Center, San Diego, Calif., for temporary duty under instruction in the U. S. Naval School, Personnel Man.

• Henrietta D. Leonard, YNC, USN, will celebrate her 12 years of service on 8 October. She is on duty at U. S. Naval Receiving Station, Pearl Harbor, T. H. She attended recruit training, and then Yeoman School at Stillwater, Okla. Chief Leonard's home is Wellsburg, West Va. She has had duty in Washington, D. C., with the Bureau of Aeronautics, with Air Transport Squadron Two at NAS Alameda, Calif., and Air Transport Squadron Four at Moffett Field, Calif. She received a letter of commendation from the Port Director, U. S. Naval Base, San Diego, Calif., for her duty at that activity.

• Annette Hart Rivers, SKC, USN, will be eligible for gold hashmarks on 8 October. Now on duty at U. S. Recruiting Station, Portland, Ore., Chief Rivers attended Storekeeper School at Bloomington, Indiana. Her home is in Framington, Mass., and in addition to duty in Boston, she has served at Pearl Harbor, T. H.; Washington, D. C.; and Cleveland, Ohio.

Working side by side with the men of the fighting force, the women who make up the Navy's career force have established themselves as a permanent and necessary part of the naval establishment.

It is fitting and proper that the Waves step out this month with their "heads held high" as they acknowledge their "Gold Hash Mark Anniversary," the 12th year of a job well done.

—Ted Sammon

WAVES AT WORK—Gertrude Anderson, AC1, USN, takes down flight plan. Right: Two Waves supervise radar class.

Navy Boxers Go Down—But Not Out

NAVY GOT OFF to a fast start in the second annual Inter-Service Boxing Tournament held this year at Lackland AFB, Texas, but the Sea Service pugilists faded in the finals and only Cliff Eskridge, QMSN, was able to win a 1954 title.

The Air Force team, which last year failed to win a single individual title, made up for it in this tourney. They went home with six individual champions and a total of 35 points, annexing the Inter-Service team championship. The Marine Corps fighters scored 22 points and gained one individual championship to place second. Navy and Army tied for third place, scoring 20 points each. Army boxers won the remaining two division titles.

Action in the finals began with flyweights Jesse Herrera of the Air Force and Navy's Cliff Eskridge squaring off.

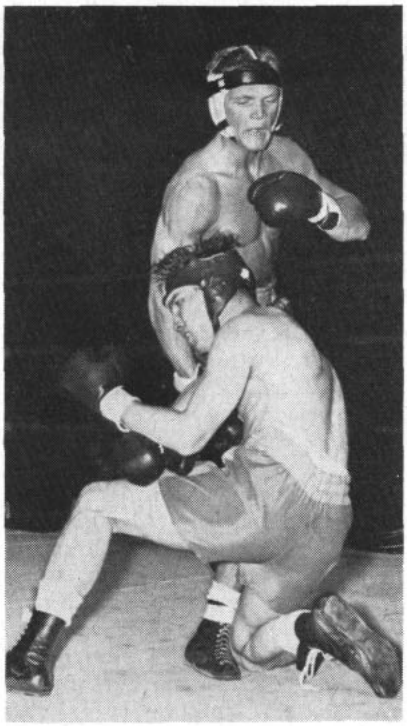
Both boys came out throwing leather. About a half a minute after the fight started, Eskridge slipped in a powerful right hook to deck Herrera who took the automatic eight count required by AAU rules. Herrera came back strong and began forcing the fight but Eskridge, although not landing as many punches, was "planting" his shots.

The torrid pace set by the fighters in the first stanza continued in the second as Eskridge began scoring heavily with both hands. So ring-wise Herrera, who has won most of his 99 previous fights, seemed to change his style of fighting from long shots to short, sharp jabs. The round ended with Herrera forcing Eskridge to the ropes.

The third round brought the 9000 fans in the stadium to their feet as the two flyweights tore into each other. Both fighters cut loose with a barrage of lefts and rights that had the fans groggy with excitement. With about a minute and ten seconds left, Herrera made his last big bid as he landed several telling blows. But the game Eskridge called on his reserve power and finished up with a sharp uppercut that snapped Hererra's head back.

Navyman Eskridge received the nod, mainly on the points he picked up for his first round knockdown and became Inter-Service flyweight champ.

At this point, Navy's chances looked bright, but the next three bouts saw the Sea Service leatherpushers on the short end of the score.



KENNEDY TROPHY winner Warren Peterson, SN, USN, floors Bill Miller, FN, USN, for Navy welterweight crown.

Ray Wharton carried the Navy colors into the bantamweight battle against Army Sgt. George Davis, who was defending his 1953 Inter-Service crown. Davis used a dynamite-laden set of mitts to defend his crown successfully.

In the second round, Wharton almost stopped Davis with a hard right, but the spunky soldier came back strong before the round ended.

The Army fighter scored with a hard left followed by an overhand right, the combination sending Wharton to the canvas in the third. The sailor got up and battled back to the finish. The decision went to the Army man by a slim margin.

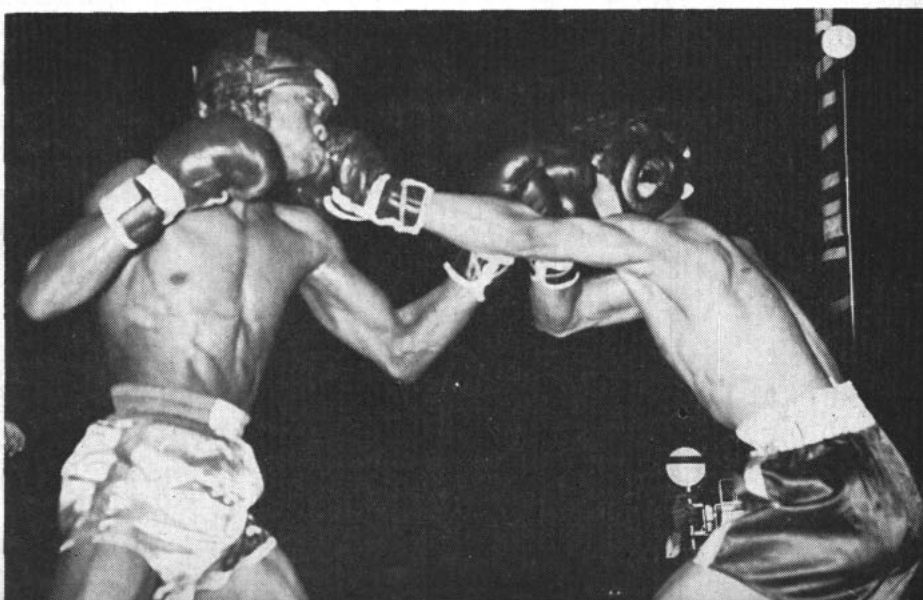
Ray Lancaster was Navy's entry in the lightweight division with Jimmy Hornsby of Air Force providing the opposition. Lancaster quickly solved Hornsby's "long loopers" but the cagey airman turned to short jabs to score often and effectively.

Lancaster forced the action in the first two rounds, but late in the second canto, he slipped and was clipped with a one-two combination. He took the automatic eight count but came back throwing leather.

The rangy Navy fighter had the best of it in the third with Hornsby fighting a cautious battle. Lancaster had come back strong at the end but with the knockdown in the second going against the Navyman, Hornsby was awarded the decision.

Abe Haynes, well-known Navy light welterweight, battled Sgt. William Morton of Air Force for the Inter-Service title. Abe appeared to show the wear of a furious fight the night before. Morton, handicapped by a bandaged knee, displayed terrific speed in the initial round. In the second, Haynes caught Morton with a couple of sharp jabs and a powerful

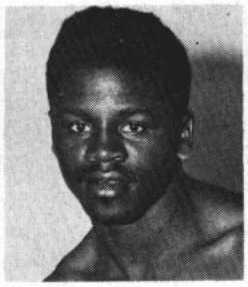
FEATHERWEIGHT Bob Nichols, BM2, USN (left), cocks his right in bout with Gene Torran, AN, USN. Nichols from USS *C. P. Cecil* (DDR 835) won All-Navy title.

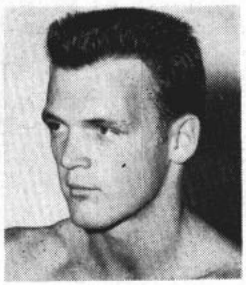



Kochersperger


Lee


Plant


Butler


Peterson

right to drive him into the ropes.

Throughout the rest of the bout, Haynes tagged the sinewy Morton hard and often, but the Air Force battler piled up points with a rapid five-punch combination. The battle, close throughout, went to Morton.

In the featherweight clash, Harry Smith of Air Force decisioned Harold Conklin of the Marines.

Hard-hitting Herbert Mickles of Army won the welterweight title from Harry Fleck of the Marines when Fleck was forced out of the fight in 2:20 of the first round because of additional damage inflicted to his already broken nose, suffered in winning the semi-final bout the previous night.

The Air Force's Paul Wright annexed the light-middleweight title as he decisioned Marine Joe Davis.

Leatherneck Dick Hill, who last year lost out to Navy's Bill Tate, decisioned Bryant Thompson to win the Inter-Service middleweight crown.

Both heavyweight class titles went to Air Force fighters as Orville Pitts decisioned Edward Jenkins of Army for the light-heavy crown and John Stewart decisioned Marine Aubrey "Bud" House in the heavyweight set-to.

All the fighters in the finals showed amazing recuperative powers. In the semi-finals the night before, all had fought tremendous battles. Briefly, this is how the Navy entries fared in the semi's.

Cliff Eskridge, the only sailor to win an Inter-Service title this year, opened festivities as he decisioned Marine Corporal Phil Ortiz. Each round saw many good flurries by both fighters with Eskridge making points by using a counter-punching right hand. The Navyman forced the fighting all the way although Ortiz covered well and proved himself to be a tough and shifty boxer.

In the lightweight clash, Navy's Ray Lancaster copped the decision over Marine Walter Byars.

Ward Yee of Air Force tried using his strength against Navy's Ray Wharton but the sailor's clever tactics gained him the decision. In the featherweight class, Bob Nichols, BM2, USN, moved fast but had trouble with Airman Second Class Harry Smith's southpaw stance. Nichols fought gamely throughout but was decked in the third and lost the decision.

Navyman Abe Haynes took the decision in the light-welter class over Army's Sammy Johnson, taking the best Johnson could throw and returning the punishment in kind. The Navy fighter won by unanimous decision.

Navy southpaw Warren Peterson went against Army Private Herbert Mickles in the welterweight semi-finals and lost a close decision. Peterson, the only fighter to win an All-Navy title by a knockout this year, displayed a neat right uppercut to tally many points. Mickles, International Golden Gloves champion in 1953, traded punch for punch with the Navyman to gain the decision.

All-Navy light-middleweight champion Bob Plant was forced to withdraw from the Inter-Service with an injured hand. His alternate, Bob Fernandes couldn't make the weight. Navy then called upon Hank Brown, FN, to battle Airman Paul Wright. An Air Force judo instructor and former Golden Gloves champion, Wright reached Brown early and won on a TKO in the second.

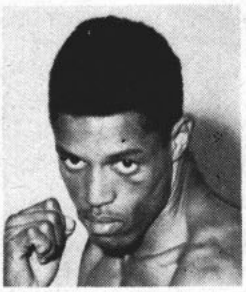
Then powerful Charlie Butler went in to battle Air Force's Bryant Thompson. Butler came out swinging and his power punches and brilliant counter-punching drew great crowd applause.

Thompson, who holds over a dozen titles, had never been decked in his long boxing career but Butler changed that, throwing a sharp left jab and a series to the head to put Thompson on the canvas. After taking an eight count, Thompson came back fighting. But the situation suddenly reversed when Thompson caught Butler high on the head with a wild left that twisted Butler's headgear. The sailor went down to one knee to adjust his headgear. Before he regained his feet he'd been counted out by the referee.

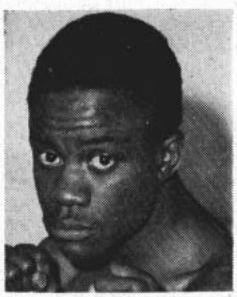
In one of the best fights of the semi-finals, Navy's Don Lee climbed through the ropes to face Airman First Class Orville Pitts. Lee, long known throughout Navy fight circles


Haynes


Lancaster


Nichols


Mathes


Eskridge

for his eagerness to mix it up, faced Pitts with a southpaw stance.

Both men were staggered in the second round and in the third Lee went down for an eight count. He came back strong, however, and for the remainder of the round was on the giving end. In a fight so close that even the winner said it could have gone either way, the decision went to the airman.

Pitts went on to win the Inter-Service "Outstanding Boxer" award. Although he had injured his right in his tremendous battle with Lee, in the finals he used his ring savvy and left hand to such advantage that he won both the title and the trophy.

Big Jake Solus, substitute for the injured Bob Kochersperger, was the last Navy boxer on the semi-final card. He went up against heavily muscled Air Force Sergeant John Stewart. A converted light-heavy, Stewart displayed a lightning fast left and a good uppercut to win.

Navy thus went into the finals with four fighters out of the 10 weight divisions. The Marines went in with five, Air Force with eight and Army with three.

All-Navy

The Sea Service champions had been determined a week before at the All-Navy boxing championships held in San Diego. Each winner gained the right to represent the Navy in the Inter-Service.

In one of the best bouts of the All-Navy, Warren Peterson, hard-hitting welterweight, scored the only knockout of the tourney when he chilled Bill Miller of 13th ND in 2:35 of the second round.

Three fighters, Don Lee, Charles Butler and Abe Haynes, successfully defended their All-Navy crowns although Lee and Butler dropped to lighter weight divisions. Last year's heavyweight king, Lee, became a light-heavy this year and won the title by decisioning Ronald Clark of NAS Alameda, Calif.

Clark scored in the first round by hooking his left and banging a straight right inside but Lee's experience and style were too much for Clark.

Charlie Butler moved from the light-heavyweight down to the middleweight division and pounded out a unanimous decision over Henry Brown of USS *Thomas F. Nickel* (DE 587). Brown spent most of the evening on his "bicycle" but Butler scored effectively when he cornered his opponent along the ropes.

Abe Haynes retained his light welterweight crown although taxed to the limit by Ray Allen of the Washington, D. C., Receiving Station. The fight was even going into the third round, both fighters having scored well in the previous stanzas. In the third, Haynes opened up with a flurry of lefts and rights to take the edge and retain his All-Navy diadem.

Ray Lancaster stopped the other defending All-Navy champion in this year's tourney, decisioning Bob Jackson to become All-Navy lightweight titlist. Lancaster dominated the action all the way, looking more the part of champion than challenger. Jackson tried fighting from a crouch, but with little effectiveness; when he straightened up, Lancaster beat him to the punch.

In the light middleweight clash, Pensacola NavCad Bob Plant won a rugged decision over Gus Fernandes of NTC San Diego. Plant used his size and power to get out of trouble when Fernandes hurt him with long right-hand punches. The NavCad's margin of victory came in the second when he drove Fernandes into the ropes with a long right hand and then moved in to land heavily with body punches.

The plucky Fernandes came back in the third to give more than he took, but Plant's second round edge was too much to overcome.

In team scoring, the Eastern Navy team again won the title with six of the 10 All-Navy champions.

Here is the summary of the new All-Navy champions, the men they defeated and the ships or stations they represent.

Flyweight—Clifton Eskridge, QMSN, USN, ComPhibLant, decisioned Johnny Eugenio, SN USN, USS *Frontier* (AD 25).

Bantamweight — Jerry Mathes, Sgt, USMC, Marine Barracks, Bremerton, Wash., won a split decision over Ray Wharton, SH2, USN, USS *Grand Canyon* (AD 28). Mathes was not authorized to represent Navy in Inter-Service due to Marine regulations so Wharton replaced him.

Featherweight — Bob Nichols, BM2, USN, USS *Charles P. Cecil* (DDR 835), decisioned Gene Toran, AN, USN, USS *Saipan* (CVL 48).

Lightweight—Ray Lancaster, SN, USN, Naval Station, San Diego, decisioned Bob Jackson, TN, USN, ComMinLant.

Light welterweight — Abraham Haynes, SN, USN, NAS San Diego, decisioned Ray Allen, SN, USN, Washington, D. C., Receiving Station.

Welterweight—Warren Peterson, SN, USN, Potomac River Naval Command, knocked out Bill Miller, FN, USN, 13th ND, 2:35 second round.

Light middleweight — Bob Plant, NavCad, USNR, NAS Pensacola, Fla., decisioned Gus Fernandes, SN, USN, NTC San Diego.

Middleweight — Charles Butler, SN, USN, USS *Jarvis* (DD 799), decisioned Henry Brown, FN, SN, USS *Thomas F. Nickel* (DE 587).

Light heavyweight—Don Lee, SH3, USN, USS *Chilton* (APA 38), decisioned Ronald Clark, AO3, USN, NAS Alameda.

Heavyweight — Bob Kochersperger, FN, USN, Naval Station Guam, split decision over Jacob F. Solus, SN, USN, NAS Corpus Christi, Texas.

—Rudy C. Garcia, JO1, USN.

Navy's Outstanding Boxer

Warren Peterson, SN, USN, representing the Potomac River Naval Command, was voted the "Outstanding Boxer" of the 1954 All-Navy tournament and was awarded the Captain Jack Kennedy Memorial Trophy.

The Kennedy Memorial Trophy is a perpetual award, given each year to the outstanding boxer in the All-Navy tourney. Selection for the award is based on the boxer's courage, sportsmanship, aggressiveness and skill.

Peterson was voted the award for his showing in the welterweight finals against Bill Miller of 13th ND. The portside slugger decked Miller in 2:35 of the second round with a left uppercut followed by a stinging right cross.

ALL-NAVY bantamweight title went to Jerry Mathes, Sgt., USMC, (right), in match with Ray Wharton, SH2, USN.

SERVICESCOPE

Brief news items about other branches of the armed services.

★ ★ ★

HOW WIDE IS THE ATLANTIC OCEAN?—The Air Force, together with other military and civilian scientists of this and other nations, hoped to find out by watching a solar eclipse on 30 June.

In a brief period of two-and-three-quarter hours, while the shadow of the moon raced 3000 miles an hour from Nebraska in this country to Pakistan on the other side of the globe, experts gathered data at a series of observation sites, some in remote sections of the world. A year of preparation was spent in making plans to view the total eclipse—there will not be another one that will span both North America and Europe until the year 2151.

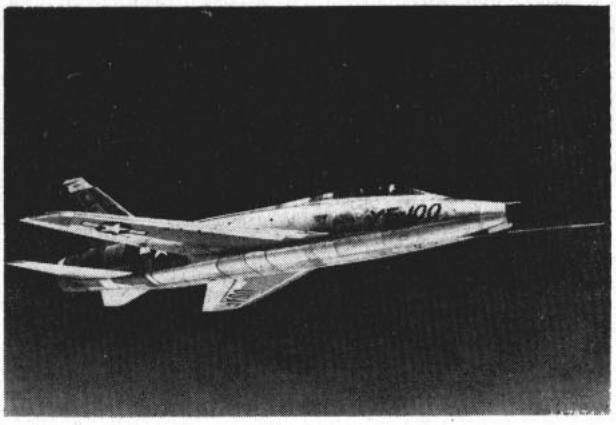
To determine the ocean's width as well as other distances, three methods were used. Named for the scientists who developed them—Bonsdorff, Lindblad and Gaviola—these methods are expected to give much more precise knowledge of the actual distances between points in the U.S. and Europe.

Use of highly sensitive photographic and photoelectric equipment is involved in all three methods. The Bonsdorff method directly photographs crescents of the sun as the moon passes between it and earth; the Lindblad method, also employing photography, shows the flash or reversed spectrum as the moon passes. The Gaviola method measures the decreasing light intensity as the moon shuts out the sun.

Because the moons' shadow and the precise time of its location are known, distances can be computed accurately through the use of the three methods. Scientists feel that a true comparison of the relative accuracy of the three techniques will result from the 30 June studies.

The eclipse path followed a huge arc, starting in Nebraska at sunrise, and proceeding through Eastern Canada, Labrador, Southern Greenland, Iceland, the Faeroes and Shetland Islands, Southern Norway and Sweden, Russia, Iran, Afghanistan and Pakistan to its ending at sunset in Northern India.

Along this path were four major sites and eight minor sites, the latter on the edges of the 80-mile-wide shadow. American scientists were responsible for observations at all sites except those in the Scandinavian countries. In Norway and Sweden, only a few U. S. observers were present, and actual operations were conducted by Finnish and Swedish scientists.



F-100 *SUPER SABRE*, one of the Air Force's latest operational jet fighters, has combat radius of over 500 miles.

★ ★ ★

A LOW-POWERED TELEVISION STATION will go into operation at a remote Strategic Air Command base in Maine this year to determine the feasibility of providing limited TV facilities for airmen stationed at certain isolated forward bases.

The experimental station, which has a range of about three miles, will be located at Limestone Air Force Base, the home of an SAC bomber unit in the northeast corner of Maine. The single-camera TV facility will present films and kinescope recordings of programs transcribed from major networks and also provide limited lecture or interview-type "live" programs.

SAC Commander General Curtis E. LeMay, USAF, said the TV facilities are being considered as a means of increasing incentives and making tours of duty at isolated bases more attractive to potential re-enlistees. If the Limestone pilot station is successful, other low-powered stations may be considered at remote installations where there is no commercial TV coverage.

★ ★ ★

AERIAL DELIVERY of heavy equipment by a new, fast method to forward area troops has been devised for the Air Force's largest cargo plane, the C-124.

As much as 40,000 pounds can be parachuted in a few seconds by a single plane under the new system. It utilizes a pair of rails, a chain drive and specially-designed pallets to move the cargo out of the aircraft quickly. Only minor structural changes of the plane are required to install the 2800-pound delivery system.

In the new method, three previously packed pallets are loaded into the plane and hooked to the chain drive. As the drop area is approached, the tie-downs are removed and at the desired time the chain drive is started. The equipment is then easily parachuted from the plane. On heavy loads, as many as six parachutes, each capable of supporting 3000 pounds, are required.

OFF WITH A ROAR is the Air Force's first tactical, pilotless bomber now in production, the B-61 *Matador*.

AN ELECTRONIC THERMOMETER which gives an accurate temperature reading in five to seven seconds has been developed by the Army Medical Srvice Corps.

The new thermometer represents the first change in clinical thermometers since the mercury column type was introduced as a diagnostic instrument in 1867. In addition to recording a temperature much faster, the new thermometer, known as "Swiftem," is more accurate in its readings.

The new electronic thermometer is light of weight and small enough to fit easily in the palm of the hand. In appearance it resembles a typical photographic light meter, and is operated by a finger button switch.

The device is powered by a mercury cell battery which operates over a wide temperature range and is unaffected by humidity. The battery, contained in the plastic case which also houses the recording meter, is designed to provide up to 750 hours of operation.

★ ★ ★

"AIR-MAILING" 105MM HOWITZERS—At the Artillery School, Ft. Sill, Okla., a new method of transporting the 105s to new positions is expected to give infantry and armored divisions the fastest, most effective artillery support of any army in history.

The helicopter used for delivering the 105 is the H-19. A wooden block measuring 4 by 4 by 12 inches, and two stout tree limbs are the only other equipment necessary. No special tools are needed. Although larger 'copters will probably carry the 105 assembled, the H-19 requires that the artillery piece be disassembled for transportation. In addition to the wheels, the 105 is lashed into three loads and slung beneath the 'copter.

Extremely rapid compared to ground movement, the new method takes less than 15 minutes to disassemble and prepare a 105 for helicopter lift, and less than 20 minutes to prepare for firing at delivery point.

Though it has been possible for some time to move other smaller artillery pieces by 'copter, a new phase in the development of artillery mobility is now open with the addition of the 105mm howitzer to the ranks of 'copter-borne weapons.

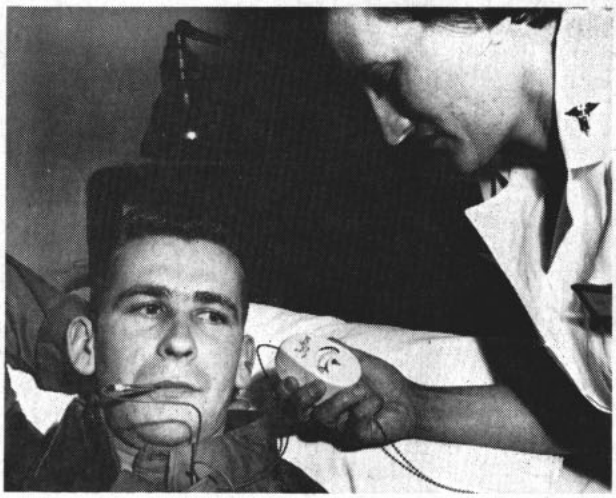
★ ★ ★

SEVERAL CHEMICAL REPELLENTS, to protect troops in the field against ticks, mites and other insects, are now undergoing extensive tests by the Army Medical Service to determine the maximum strength of the repellents that the human body can withstand without harmful or discomforting effects.

Tests already conducted indicate that when applied to uniforms, the new repellents will provide field troops with effective protection from disease-bearing "arthropods," such as ticks, spiders and mites.

To assist the Army in testing the repellents, 100 prisoners at a federal penitentiary have voluntered to wear clothing impregnated with the compounds for a period of four months. During the test period, the volunteers will carry out their normal duties while wearing treated clothing. Once a week, in an effort to simulate conditions of a field soldier, they will receive clean clothing impregnated with the repellents in varying degrees of strength.

The present tests are being conducted solely to determine the maximum strength of the chemical solution that the human body can comfortably withstand, and the volunteers will not be exposed to the bites of disease-bearing mites.



ELECTRONIC thermometer, first big change in clinical thermometer since 1867, was developed by Army dentist.

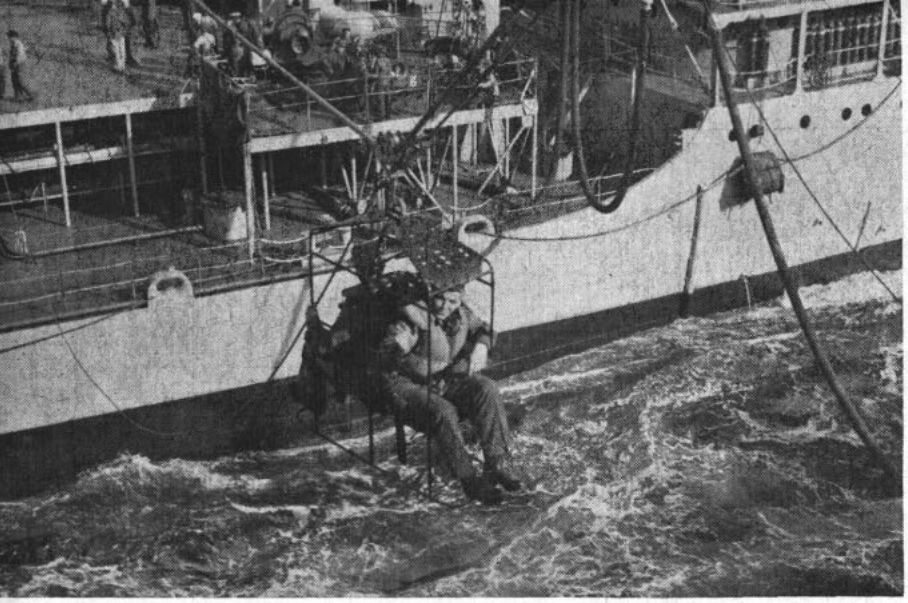
★ ★ ★

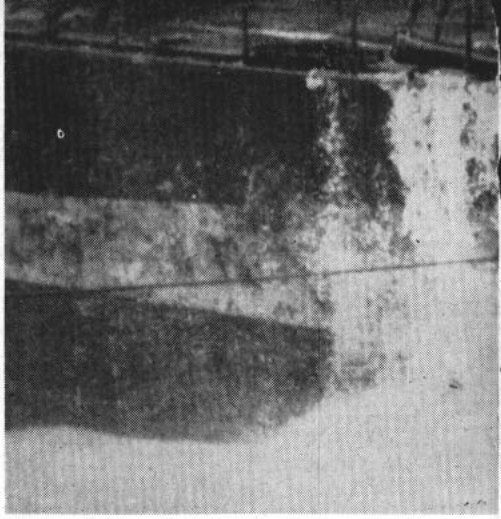
ARMY RANGER OR ARMY AIRBORNE TRAINING will now be the bill of fare for all newly-commissioned Regular Army Second lieutenants in Infantry, Armor, Artillery, Engineering Corps and Signal Corps. The program, begun in June of this year, is a move designed to develop a "rugged, well-rounded" corps of Army officers.

The course to be taken will be optional with the individual officer, but those who elect and fail to complete the Airborne course will then be required to complete the Ranger course.

The Airborne course consists of approximately four and a half weeks of intensive conditioning and training in all phases of Airborne techniques including jump training. The Ranger course calls for rigorous and realistic training under simulated combat conditions for a period of approximately two months.

ARMY'S T-43 Heavy Tank—newest and biggest of the post-WW II line-up—mounts a 120-mm high velocity gun.





From Bosun's Chair

OVER THE WAVES go two Marines in double highline transfer chair. Above right: Sailor is pulled out of sea via highline. Below: Life raft is another means of transfer.

THERE'S AN OLD SAYING about there being "many ways to skin a cat." This idea may well be applied to the transfer of personnel from ship to ship at sea.

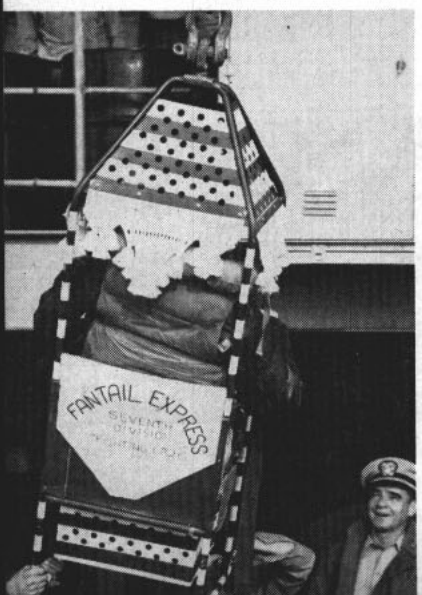
Sometimes when transferring several persons the transfer is accomplished by yard and stay or the Burtoning method. Sometimes a helicopter or small boat is used. Occasionally a transfer is made when a vessel is alongside another vessel, with no way on.

More often than not, however, the highline transfer is the method used. This system, involving the use of trolley blocks, highline, inhaul and outhaul lines, chair or canvas bag serves to transfer stores, provisions and mail as well as personnel from ship to ship while the vessels are underway. Moreover, it is the approved and usual method for transferring personnel.

There are almost as many "conveyances" for transfer of personnel from ship to ship as there may be reasons for such transfers. The photographs on these two pages will show you a variety of ways to transfer men. (The photos on page 24 illustrate several steps in the transfer of a patient.)

You will note, for example, that two men can be transferred at the same time in a double highline transfer chair. You'll also see how coaling bags, life rafts,

'FANTAIL EXPRESS' is knickname for this highline transfer chair. Center: ADM Arthur W. Radford, USN, takes ride in 'coaling bag.' Right: Plane crewman is returned to aircraft carrier via boatswain's chair after rescue at sea.



to Breeches Buoy

BREECHES BUOY RIDE—Sailor is helped aboard destroyer after transfer in a 'breeches buoy.' *Below:* Variation of breeches buoy is used in this highline transfer.

boatswain's chairs, highline transfer chairs and breeches buoys can be used.

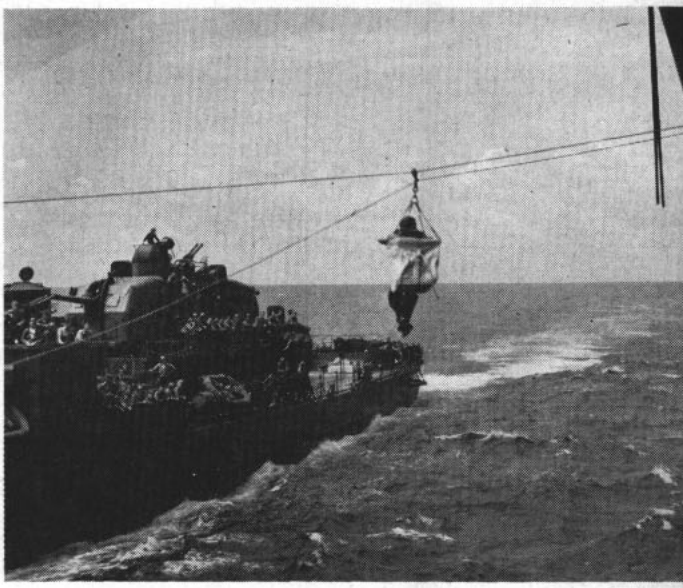
In the photograph at the top center of these two pages you can see how a Navyman who was swept over the side by a large wave was rescued by means of a highline. Hauled in by a tanker's winch, the sailor suffered only a bruised knee and the after-effects of a three-minute dunking. The incident occurred when a cruiser was refueling from the tanker in rough seas.

The operation of a transfer at sea, while no cinch, is not so difficult as it may seem. Today it can be carried out at speeds and under conditions that would have been considered impossible a few years ago.

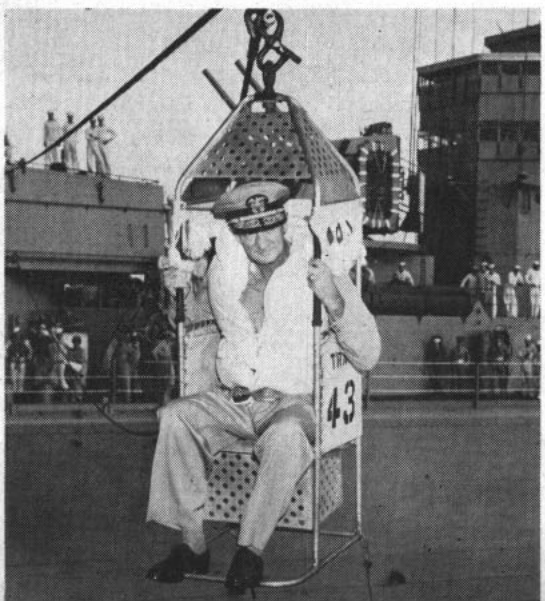
In a transfer of this sort, the larger—or least maneuverable—ship maintains a constant course and speed. As one example, the smaller vessel, such as a destroyer, comes up from astern on either quarter, reducing speed so that her bridge will be even with the larger ship's stern and her forecastle varying from approximately 40 to 120 feet away from the quarter.

When the smaller ship is steady in position, a manila highline can be passed and the transfer begun.

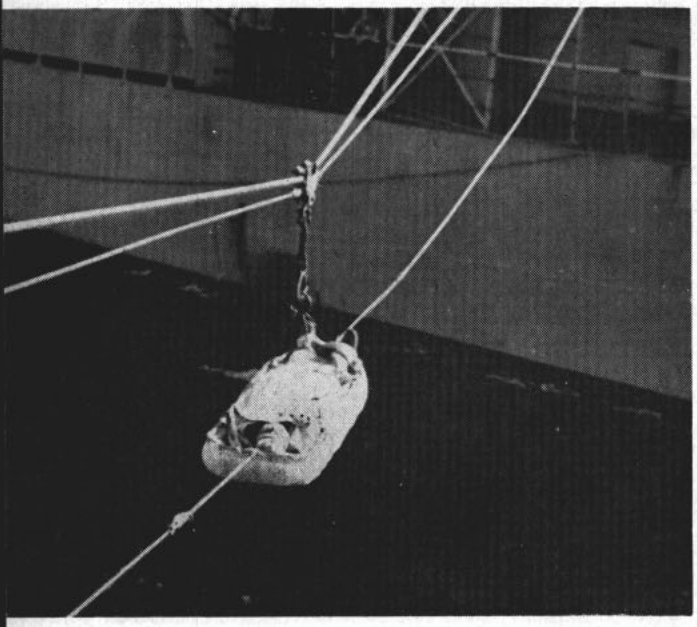
In preparing to make a transfer via manila highline, the high line should be rigged as nearly level as pos-



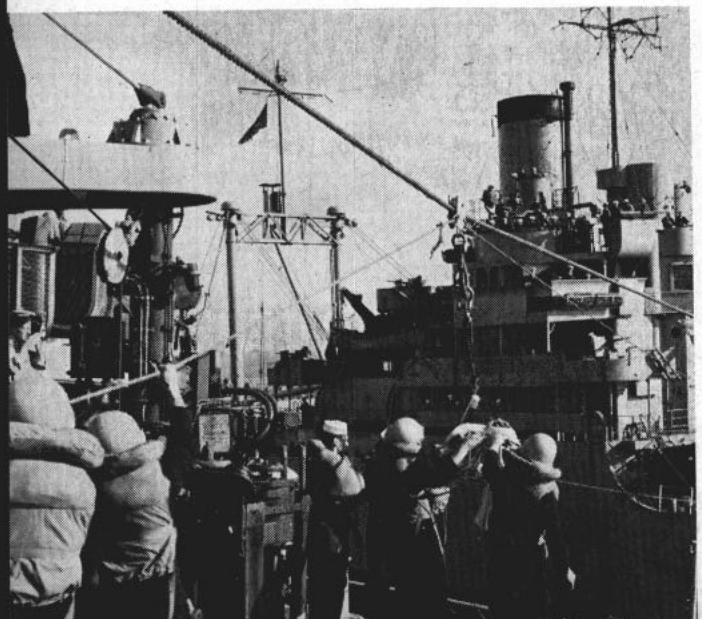
'MACNAMARA LACE' decorates this 'highline express' carrying VADM John H. Cassady, USN, from *USS Salem* (CA-139) to *USS Coral Sea* (CVA 43). Right: Stokes litter is used to transfer this victim of appendicitis to Navy cruiser.



LINE IS RIGGED for transfer of patient. Below: Injured man is carefully maneuvered to the receiving vessel.



PATIENT is lowered away to *USS Cascade* (AD 16). Right: Transfer safely accomplished, patient is taken to sick bay.



sible. It should always be kept taut by manpower when transferring personnel. A winch may be used only for cargo.

A trolley with safety hook rides the line. The object to be transferred is secured to the safety hook. Lines from each ship are attached to the trolley so that it can be pulled back and forth on the heavy line.

The "load" is transferred between the ships after tensioning the highline, utilizing either manpower or a winch. Simultaneously, crews are hauling in and alternately paying out on the inhaul and outhaul lines which are attached to the trolley.

Wounded persons are usually transferred by means of the Stokes litter or stretcher. The man concerned is lashed securely to the stretcher which, in turn, is then secured to the trolley block on the highline.

When highline transfer chairs aren't available, coaling bags—once very necessary to coal-burning ships—are sometimes used. They come in handy in transferring stores, mail and provisions as well as Navymen. One of the pictures on these pages shows the present Chairman of the Joint Chiefs of Staff, Admiral Arthur W. Radford, USN, making a "crossing" in a coaling bag.

It's easy to see that transfer by highline is one of the sea operations requiring the most skillful handling. It calls for close coordination and liaison between all parties in the participating vessels. Successful transfers can be made in rough seas and bad weather as well as in calm water with blue skies. Bad weather transfers, however, are reserved for emergency situations. And, in fair weather or foul, personnel being transferred always wear life preservers.

Modern day transfers at sea are a far cry from the switches of personnel which took place in the days of sailing ships. Men weren't transferred from a smaller to a larger vessel for surgery. High ranking officers didn't ride highlines to attend meetings.

Transfer of men from ship to ship in those days usually went under the name of "boarding parties"—a vital part of naval warfare then. Ships maneuvered close aboard so that grappling hooks could be swung over and boarding parties could swarm aboard the opposing vessel. Even so, expert seamanship was needed to make the "transfer," so-called, successful.

And today, more than ever before, it takes topnotch seamanship to handle the "highline express."

LETTERS TO THE EDITOR

Thomas Stone *Was a Fighting Ship*

SIR: Periodically, mention is made in ALL HANDS of ships' histories which have been prepared. Each time you run a list I search in vain for the name of USS *Thomas Stone*, and each time I am disappointed.

I was Supply Officer of this fine ship from pre-commissioning days, serving on board all through her short but whirlwind career until her untimely end as a mobile unit in a great Amphibious Force. As you no doubt know, she finally came to rest, stranded beyond recovery, a victim of torpedoing, bombing and the wind and sea, in the Bay of Algiers.

Can you tell me if there are any written records of this fine ship?—E. J. S., CAPT, (SC) USNR (Inactive)

• *Captain, you'll be glad to hear that the history of the troop transport USS* Thomas Stone (*APA* 29), *has been written. It is available to anyone who drops a note to the Office of the Chief of Naval Operations* (*Op*-29), *Room* 1534, *Main Navy Building, Washington* 25, *D. C.*

In addition, the February 1950 *issue of* ALL HANDS *carried a condensed version of the saga of* Thomas Stone, *telling how the transport was torpedoed on her way to the landing in North Africa in November* 1942, *how she was laboriously towed into Algiers harbor, how she underwent at least one air attack in which she suffered bomb damage, how she dragged anchor and ended up on a sand bar when heavy weather hit the harbor, how Navy salvage crews tried without success to ease the old girl off her unglamorous perch and how the effort was finally given up and the ship decommissioned and sold to a French firm for scrap steel.*

Despite all her troubles, the ship continued to operate her guns to the end, the gun crews firing at anything that resembled a swastika. Here's to more like her.—ED.

Commissioning Detail for LSD 31

SIR: The Navy is building four new LSDs to add to the fleet. I understand that one of them will be christened USS *Point Defiance* (LSD 31). Approximately when will this ship be commissioned and when will the commissioning detail be assigned?—G. E. B., PN2, USN.

• USS Point Defiance (*LSD* 31) *is tentatively scheduled for completion in mid-summer* 1955. *The commissioning detail will be assigned approximately two months prior to the final completion date.*—ED.

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to: Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

PIO Course for Officers

SIR: Does the Navy provide a school or other instruction facility for line officers on active duty who desire training or courses of instruction leading to primary duty billets as Public Information Officers?—F. S. O., ENS, USN.

• *At present there is no formal Navy course for the training of officers who are to be assigned to Public Information billets. However, present plans call for the establishment of a suitable short course for Information Officers within the Naval School, Journalists, Class A, at Great Lakes, Ill. Upon final approval of the proposed course, information relative to eligibility and applications will be carried in* ALL HANDS.—ED.

Enlisted Man Retiring as Officer

SIR: There is a difference of opinion concerning the laws affecting the ultimate retirement of men holding "Certificates of Satisfactory Service" as commissioned officers of World War II. One opinion is that a man who has been both a commissioned officer and an enlisted man should complete 20 years' active service (day for day) before transferring to the Fleet Reserve.

The other opinion is that 19 years, six months and one day is enough active duty to protect your commissioned status and make you eligible for retirement at the highest rank held after ten years in the Fleet Reserve.

I have been unable to get a definite answer to this question. The answer would be a great help to me and to many other EMs who want to determine the best date for transfer to the Fleet Reserve.—L. F., ADC, USN.

• *If you held officer status during World War II and the Secretary of the Navy determines your service in such status as "satisfactory," you will be advanced to the highest rank held upon retirement.*

Length of service has nothing to do with the advancement. However, it is possible that it may affect your basic pay which is credited on a day for day basis. —ED.

Battleship Batteries

SIR: I am a retired CPO living in Pine Bluff, Ark. My only real contact with the Navy is through your magazine. I'm always selling the Navy—and ALL HANDS is my best source of information.

I have a couple of questions I hope you'll be able to answer. What was the size of the main battery of the battleship USS *Mississippi* when she was commissioned?

Also, what battlewagon was the first to have a 16-inch main battery and which one was the first to have electric drive?—J. K. B., EMPC, USNFR.

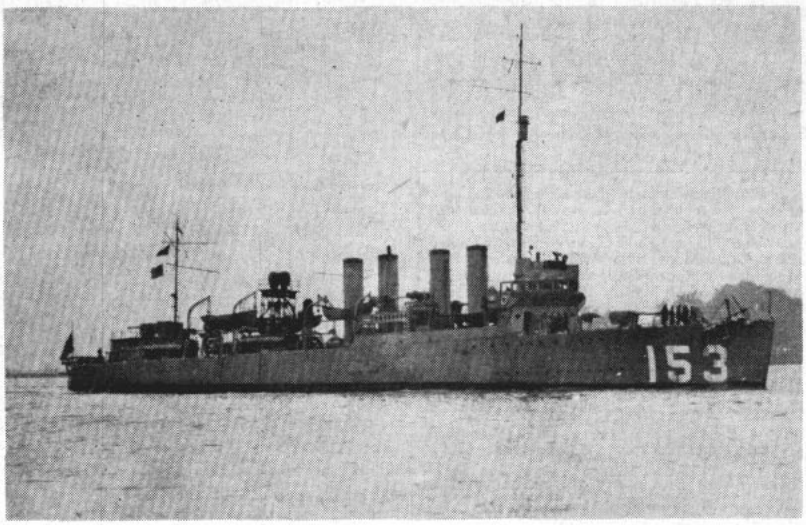
• USS Mississippi (*formerly BB* 41) *mounted twelve* 14-*inch* 50-*caliber guns in her main battery when she was commissioned. You undoubtedly know that "Old* Miss" *was converted into an experimental gunnery ship and given the designation "EAG* 128" *in* 1947. *All her* 14-*inchers have now been removed to make room for experimental rocket and missile launchers to be placed on her broad decks. She is a familiar sight to Navymen in the Norfolk area.*

In answer to your other questions, the Colorado *class battleships* — USS Colorado, USS Maryland, USS West Virginia *and* USS Washington (*BB* 47)— *were the first class to mount* 16-*inchers. The first to have turbo-electric drive was* USS New Mexico (*BB* 40).—ED.

Agreement to Extend

SIR: I am a member of the Naval Reserve and volunteered for active duty in October 1952 for a period of two years. I wanted to go to Aviation Electronics Technician School, so in March 1953 I signed a mimeographed paper saying that I would remain on active duty for 24 months from that date. Is this considered a valid contract or will I be released from service when my two years are up?—C. S., ATAN, USNR.

• *An agreement is an agreement. Inasmuch as you signed a statement agreeing to remain on active duty for a period of* 24 *months from the date you entered Aviation Electronics Technician School, and since you reported to the Naval Air Technical Training Center, Memphis, Tenn., on* 18 *Mar* 1953 *for that course of instruction your agreement is valid and binding. Therefore you will not be eligible for release to inactive duty until on or about* 17 *Mar* 1955. —ED.



USS BERNADOU (DD 153), with ensign and jack at half-mast, escorted vessel carrying the Unknown Soldier from Cape Henry to Washington, D.C.

Half-Masting the National Ensign Underway

SIR: In the August 1953 edition of ALL HANDS, you list two occasions on which the National Ensign is half-masted underway. Shortly after reading this, I came across a photo of the old USS *Bernadou* (DD 153) which showed the ship under way with the National Ensign at half-mast not only at the gaff but also at the fore truck and at the flagstaff.

The picture puzzled all the "old timers" who saw it until they turned it over and read the caption which stated "Destroyer Guard Preceding *Olympia* with Unknown Soldier."—E. L. F., CAPT., USN.

• *The destroyer* USS Bernadou *sailed from Hampton Roads, Va., and met* Olympia *off Cape Henry to escort that ship into Washington, D. C. When* Bernadou *joined* Olympia, *she immediately half-masted her ensign and jack.*

When Olympia *left LeHavre, France, with the remains of the Unknown Soldier in October* 1921, *she was escorted out of the port by some French Navy ships and* USS Reuben James (*DD* 245). *At dockside ceremonies in the French port, the band played the funeral march as the ships got underway. When the first note of the march was sounded, all ships half-masted their ensigns and jacks on orders from Rear Admiral L. H. Chandler,* USN, *ComTrain, U. S. Atlantic Fleet.*

Reuben James *stayed with* Olympia *until all French Navy ships had pulled away and then* Reuben James *left to regain her operating station.* Olympia *proceeded across the Atlantic until met by* Bernadou *off the U. S. coast on* 10 *November.*

As you know, current rules covering half-masting of the ensign and jack are contained in Articles 2185, 2187, 2191 *and* 2193, "*U. S. Navy Regulations* 1948."—ED.

Navy Locksmiths

SIR: My ship, like many others, has a man aboard who is assigned duties as a locksmith. Recently, the man, an ME1, inquired about being assigned a secondary classification code as locksmith. I checked all likely Navy enlisted clasification codes and could find nothing in either the regular codes or special service codes. Is anything being planned by BuPers along this line to assign secondary enlisted classification codes to locksmiths?—J. E. B., PN2, USN.

• *In the past, locksmith duties have not been considered to be a part of an occupational assignment of enlisted personnel nor a definite requirement of ships. Recently, however, several requests have been received from the fleet for the establishment of an enlisted classification code for locksmiths.*

In order to provide for maximum identification of enlisted skills and requirements, a classification definition and code for the specialty is currently being studied and will be proposed for approval as a forthcoming change to the Manual of Navy Enlisted Classifications.

This classification would be included under the 9500 *code series, Miscellaneous Occupational Group NavPers* 15105 (*Revised*).—ED.

Typing Requirements for AKC

SIR: Several months prior to taking the exam for AKC, I had occasion to check the *Qualifications Manual* for advancement in rating. The manual does not list any typing requirement for AKC. However, the operation typing test was included in the examination packet.

The thing that puzzles me, and I don't think it fair, is that last year the men going up for SKC didn't have typing as a requirement on the exam while those men going up for AKC did. Why should typing be dropped as a requirement for one branch of storekeeping and not the other? Any information you could give me on this subject would be greatly appreciated. —S. W., AK1, USN.

• *Your attention is invited to para* 2.d(5) *of the preface on page viii of NavPers* 18068 (*Revised*) which *states: "In the applicable rates column . . . the rate indicated by number or letter is the lowest rate for which each qualification is required."*

Personnel in all higher pay grades must also possess the qualifications prescribed for the lower rates in a rating." In regard to the typing requirements for Aviation Storekeepers (AK), *although the rate indicated for the typing qualification of* 30 *words a minute is for* AK1, *personnel qualifying as Chief Aviation Storekeepers as well as First Class Aviation Storekeepers are responsible for the fulfillment of these requirements.*

The revisions to the qualifications of 50 *ratings, published in the "Manual of Qualifications for Advancement in Rating," NavPers* 18068 (*Revised*), *were developed from the latest occupational data available from all types of naval activities, including fleet and shore installations and interested bureaus and offices. The available data indicated that, on a Navy-wide basis, the AK rating required more typing than the general service Storekeeper* (SK) *rating at the chief petty officer level. This conclusion was concurred in by BuSandA.*

It is further noted that the current revision lowered the maximum typing speed for both the SK and AK ratings from 40 *to* 30 *words per minute on the basis of actual occupational requirements in these ratings.*

The Chief of Naval Personnel is aware of different occupational requirements existing in different types of ships and at various shore installations. In order to provide equitable qualifications for advancement of all personnel doing typing, a study is currently underway to determine the exact typing needs throughout the Navy. Upon completion of this study, the results will be used to re-evaluate performance tests in typing currently required for advancement.—ED.

Ham Stations Prohibited on Ships

SIR: Is it possible to operate an amateur radio station aboard ship? I am a licensed amateur radio operator and meet all the qualifications otherwise but have been unable to get a ruling on whether or not I could set up a station aboard.—W. G., RM2, USN.

• *Looks as though you'll have to confine your radio work to official duties. Article* 167.1 *of USF* 70(B) *states that amateur radio stations on board vessels are prohibited.*—ED.

Selection for Warrant Officer

SIR: An article in the April 1954 edition of ALL HANDS stated "... all Regular Navy and Naval Reserve chief petty officers and petty officers first class on active duty, who had at least six years' naval service and had not reached their 35th birthday on 1 Jan 1952, were eligible for consideration for promotion to warrant officer."

In view of the fact that I fall within this category, would it be possible to find out where I stand on the eligibility list from which appointments are made? —H. D. T., CTC, USN.

• *You were considered for appointment to warrant grade by the selection board which convened in BuPers during April-July* 1952 *but were not among those who were recommended for appointment.*

The statement contained in the April 1954 *issue of* ALL HANDS *should not be construed to mean that everyone considered by this board was placed on the eligibility list.*—ED.

PG Courses for LDOs

SIR: Are LDOs eligible for postgraduate courses at the PG school at Monterey, Calif.? My designator is 1790 (Aviation Electronics) and I am interested in the Electronics Engineering course. I would appreciate any information available on this subject.—J. B. H., LTJG, USN.

• *Even though series* 1700 *officers of the Aeronautical organization normally occupy billets for the* 1300 *series, these officers are not considered eligible for any of the postgraduate courses available to series* 1300 *and* 1500 *officers, with the exception of designator* 1760. *Officers with this designator are eligible for the one-year cinematography postgraduate course.*

Limited Duty Officers, as you know, are a group of highly qualified and experienced officers whose previous service and marked abilities have recommended them for commissioning. In other words, an officer selected as a specialist should be already qualified to discharge the duties of the specialist designation which he carries. LDOs compete among themselves for advancement and for promotion purposes and are considered as a separate category of line officer—ED.

UNITED NATIONS FLAG is sent aloft aboard *USS Putnam* (DD 757) at Haifa, Israel, on 23 July 1948.

First to Fly UN Flag

SIR: Could you by any chance tell me what U. S. ship was the first to fly the flag of the United Nations?—J. B. W., DM2, USN.

• *As far as we can find out from the Navy's records, the destroyer* USS Putnam (*DD* 757) *is the only claimant for this honor.*

Putnam's *log shows that she hoisted the blue-and-white United Nations flag at* 1200 *on* 23 *July* 1948 *when she was anchored in Haifa harbor, Israel. The ship at the time was in the service of the international organization, being assigned the U. N. Mediator Count Folke-Bernadotte, who later met death while attempting to negotiate a truce between the Arab nations and Israel.*

Incidentally, in 1952 *a complete set of instructions were issued and made a part of DNC* 27, *"U. S. Naval Flags and Pennants, Descriptions, Uses and Customs." If you're in doubt as to when or where to fly the U. N. flag, this is the place to go for an answer.*—ED.

Qualifications for Attache Duty

SIR: One of the basic qualifications for Attache Duty is to be a second generation citizen of the U. S. According to that regulation I am not eligible for it. However, my brother who is not a second generation citizen, is now serving in the Marine Corps and had his application approved for that type duty. My question is, are the Marines held to the same qualifications as the Navy? —J. F. K., YN3, USN.

• *The Marine Corps has only six enlisted billets with naval attaches, and while the provisions of BuPers Instruction* 1306.6 *are not applicable for those billets, the personnel selected to fill them meet the qualifications stated in that instruction.*

Some confusion in terminology may exist in your query as the Marine Corps has approximately 700 *enlisted billets for embassy guards in the overseas establishments of the Department of State. The provisions of BuPers Inst* 1306.6 *do not apply for personnel assigned to these billets. The citizenship requirement for these billets only require that the individual be a native born citizen of the U. S.*

For your information it is contemplated that BuPers Inst 1306.6 *will be revised to enable personnel who are not second generation citizens to apply for some BuPers-controlled overseas shore billets.*—ED.

Waivers on GCT for Commissions

SIR: According to BuPers Inst. 1120.7A, an enlisted man in the Regular Navy may apply for a commission if he has a GCT or ARI of 60 or higher. I would like to know if the USAFI GED (second year college level) may be used in lieu of the completion of the required two years of college work and also, if a waiver can be granted on a GCT mark below the minimum requirement? —F. L. M., TESN, USN.

• *No, the USAFI GED test is not acceptable for the two years of college level authorized as one of the educational requirements for participation in the "Regular Navy Integration Program." All applicants are required to establish their qualifications by fully meeting all the standards set forth in BuPers Inst.* 1120.7A. *No waivers are granted. Details on the Regular Navy Integration Program were published in the April* 1954 *issue of* ALL HANDS, *p.* 10.—ED.

Quota Limitations on Advancement

SIR: One of shipmates has taken the DM3 exam four times. Each time he has passed but due to quota limitations, hasn't been rated. We would like to know the quota limitations for DM3, DM2, DM1 and DMC. Also, does the present number of DMs exceed the quota limit?—L. D. L., DMSN, USN.

• *Quotas for advancement in rating are based on the over-all requirements of individual ratings and on the number of personnel allowed by annual appropriations in each pay grade. Thus, the term "quota limitation" can be a numerical limitation, a budget limitation, or both.*

As a result of the February 1954 *service-wide exams, promotion of all personnel who qualified for DMC and DM*1 *was authorized. However, quota limitations were applied to promotions to DM*2 *and DM*3. *For example there were* 241 *strikers who qualified for the* 22 *promotions authorized to* DM3.—ED.

More on Battle Cruisers

SIR: In your letter to the editor on "Battle Cruisers," January 1953, p. 25, I feel that the first paragraph in the answer might be misleading.

Battle cruisers were never actually used as such in the U. S. Navy. In 1916 six battle cruisers, the *Lexington, Constellation, Saratoga, Ranger, Constitution* and *United States* were authorized by Congress and they were laid down in 1920 and 1921.

When construction of these ships was halted in accordance with the Washington Disarmament Conference, the hulls of *Lexington* and *Saratoga* were converted into the well-known aircraft carriers. (The other four were scrapped.)

These battle cruisers were to be the fastest and most powerful in the world's navies. Each had a normal displacement of 43,500 tons and a length of 874 feet. They were to have a speed of 33¼ knots and each was to carry eight 16-in. 50-cal. guns in twin turrets.

USS *Concord* (CL 10), which you mentioned, was not a battle cruiser, but one of the four-stack 7050-ton light cruisers of the *Omaha* class.

Speaking of the *Omaha* class cruisers, nine of them were scrapped or sold in 1946. A tenth one *Milwaukee* (CL 5), did a five-year hitch in the Russian Navy as the *Murmansk*. In 1949, this ship was returned to the U. S. and sold.

Incidentally, I was the third reader of this excellent copy of ALL HANDS so I have to hurry and get this note off in order to pass the copy of the magazine on to the fourth reader.—Albert O. Momm, CAPT, USN.

• *You are entirely correct. Although we have the biggest "volunteer" research staff in the Navy (all our readers) only you and one other person discovered this slip.*—ED.

Souvenir Books

In this section ALL HANDS prints notices from ships and stations which are publishing souvenir records and wish to advise personnel formerly attached. Notices should be directed through channels to the Chief of Naval Personnel (Attn: Editor, ALL HANDS), and should include approximate publication date, address of ship or station, price per copy and whether money is required with the order.

USS *Saint Paul* (CA 73)—A limited number of cruise books covering the third Korean cruise of USS *Saint Paul* are available. Send check or money order for $5.00 to Custodian, Recreation Fund, USS *Saint Paul*, (CA 73), c/o Fleet Post Office, San Francisco, Calif.

Shipping Household Effects

SIR: If a man is transferred from Boston, Mass., to Pascagoula, Miss., for temporary duty in connection with the fitting out of a ship and is to be aboard when it is commissioned, is he entitled to transportation of household goods and reimbursement for dependents' travel to Pascagoula?

Should the home port be established at Norfolk, Va., is the man then entitled to transportation of household goods and reimbursement for dependent's travel from Pascagoula to Norfolk? —A. A. M., YN1, USN.

• *Transportation for dependents, in such a case as you stated, would come under the provisions of Para 7007-2, "Joint Travel Regulations." If the fitting out period from the date of reporting to the date of commissioning is less than 20 weeks, transportation for dependents may only be authorized from the old permanent duty station to the assigned home yard or home port direct. If the period is over 20 weeks you can receive reimbursement for dependents' travel.*

In connection with the shipment of household effects, "Joint Travel Regulations" as presently worded, provide that upon receipt of orders to temporary duty in connection with the building, fitting out or conversion of a vessel, the permanent change of station weight allowance of household goods may be shipped to either the location where the building, fitting out or conversion is taking place or to a point of selection within the U. S.

If the shipment is made to the building, fitting out or conversion point, reshipment to the home yard or home port may be authorized upon commissioning of the vessel. However, if shipment is made to a point of selection, no further shipment is authorized upon commissioning of the vessel and assignment of a home yard and home port.

Ordinarily the period involved in the fitting out, conversion or reactivation of a vessel does not exceed a two- or three-month period. Therefore, the owner should contact his prospective commanding officer to determine how long the vessel will be at the fitting out, conversion or reactivation point, and request advice as to whether or not household goods should be shipped to that point.

In any event, shipment of household goods should not be made unless the owner intends to use the property. Rather, BuSanda recommends that only a small portion of the household goods, those items required for temporary housekeeping, be forwarded to the fitting out, conversion or reactivation point and the bulk of the household goods be placed in local storage pending shipment to the home yard or home port of the vessel after its commissioning.—ED.

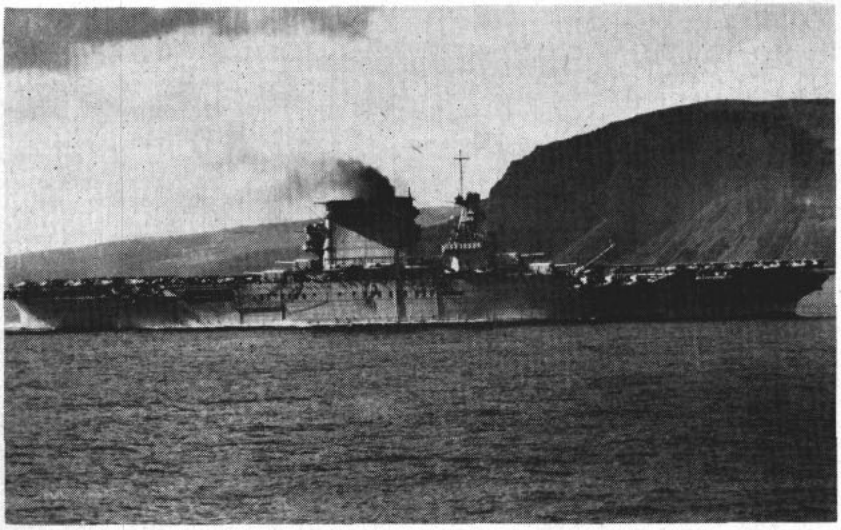
Temporary Officers

SIR: I'm a temporary officer with just short of 27 years' service, 11 of which have been commissioned service. If I should be reverted to enlisted status on 1 Jul 1955 and then be placed in the Fleet Naval Reserve with a total of 27 years, six months and 11 days of service (day for day), when could I expect to be re-advanced to my officer grade and with the pay of that grade?

One more question. My first enlistment was a minority and I only served three years, two months and 14 days before getting discharged on my 21st birthday. Does that count as a full four years or only for the time actually served?—W. T. G., LT, USN.

• *In answer to your first question, you could expect to be advanced to your officer grade (at present time, highest rank held prior to 30 Jun 1946), with pay, upon completion of 30 years' active and inactive service.*

As for question No. 2, a minority cruise counts as a full four years toward retirement from the Fleet Reserve, but does not count for longevity credit or for retirement from the regular Navy. —ED.



NO BATTLE CRUISER THIS—*USS Lexington* (CV 2) was converted to an aircraft carrier. Flattop, commissioned in December 1927, was sunk in Pacific in 1942.

Recognition for Beneficial Ideas

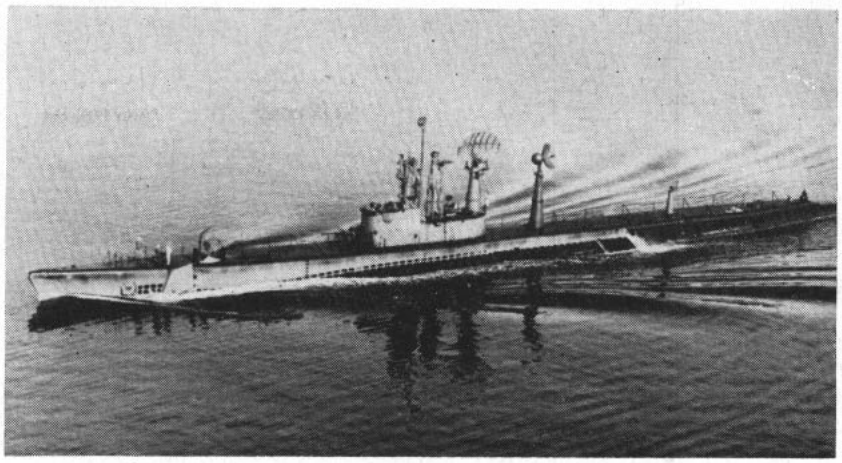
SIR: Is there a beneficial suggestion program for military personnel similar to the civilian program wherein monetary awards are possible?—C. D. K., LT, USN.

• *In the past, the proposal for such a program has been made several times and has been seriously considered by the Chief of Naval Personnel, CNO, and the Secretary of the Navy. Each proposal has been unsuccessful due primarily to the following reasons:*

(1) *Military personnel are on duty 24 hours a day and are supposed to perform their assignments to the best of their ability at all times.*

(2) *Normally it is considered that the inducements which cause a man to enlist are sufficient to produce his best efforts without extra reward. However, modification of a beneficial suggestion idea has been used at some military activities by providing for extra leave or liberty, letters of commendation, and so on, for particularly valuable suggestions.*

Individual effort to achieve superior performance is the criterion on which the selection process and career advancement in the Navy is based. Moreover, as an assurance of proper recognition of a subordinate's performance, a commanding officer is directed by Article 0709 of "Navy Regulations" to "insure that noteworthy performance of duty of personnel under his command receives timely and appropriate recognition and that suitable notations are entered in the official records of the individual."—ED.



RADAR picket submarines, developed since World War II, are designed to detect enemy aircraft, ships and guided missiles and to warn fleet units.

Who Can Wear PUC?

SIR: In 1945 VBF-17 was established, then redesignated VF-6B in 1946 and finally designated VF-62 in 1948.

As VBF-17 the Squadron was awarded the Presidential Unit Citation for action against Japan, Bonins, and Ryukyus during the period 16 Feb-10 Jun 1945 while serving as part of Air Group 17 aboard the carrier USS *Hornet* (CVA 12).

And now to my question. Can personnel now serving with Fighter Squadron 62, wear the Presidential Unit Citation ribbon without star as provided in NavPers Instructions, or did the redesignation of the squadron nullify this award for members joining the squadron after the award?—K. W. C., LTJG, USN.

• *Present regulations provide that personnel subsequently joining a cited unit may wear the Presidential Unit Citation ribbon without a star and remove it upon detachment from that unit. Redesignation of such a unit does not nullify the award.*

However, a change that would abolish this privilege is now under consideration, and if approved, only personnel who were in the squadron or unit at the time of the award would be eligible to wear it.—ED.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying The Editor, All Hands Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four or more months in advance.

• 33*rd Seabees*—The eighth annual reunion will be held at the Park Sheraton Hotel, New York, N. Y., on 17, 18, 19 September. For further information contact Elwood E. O'Brien, 115-A West 168th St., Bronx 52, New York, N. Y.

• *Waves*—The 12th anniversary reunion will be held 14 and 15 August in San Francisco, Calif., at Hotel Mark Hopkins. Inquiries should be addressed to P.O. Box 45, San Francisco, Calif.

• *Carrier Air Group* 83, USS *Essex* (CV 9)—A reunion will be held 7 August at Hotel Governor Clinton, New York, N. Y. For further information write Manager, CAG 83 Reunion, c/o Hotel Governor Clinton, or W. C. Durfee, 48 Victoria Road, Hartford, Conn.

• USS *Concord* (CL 10)—The third annual reunion will be held on 28, 29 and 30 August in Biloxi, Miss. Headquarters will be at the Buena Vista Hotel. Contact Philip A. Smith, 1366 E. Livingston Ave., Columbus 5, Ohio.

• *Air Group* 20—All hands who served in AG-20 or its component squadrons during 1943-45 are invited to attend the reunion to be held in New York, 23 October at Hotel Astor. For further details write Chauncey Stillman, 230 Park Ave., New York 17, N. Y.

• *MTB Squadron* 28—A reunion will be held 20, 21 and 22 August at Bud Smith's Hall, 2975 N. Clybourn Ave., Chicago, Ill. Check in with Stanley Bazarek, 2715 N. Washtenaw Ave., Chicago 47, Ill.

• 82*nd and* 519*th Construction Battalion*—The eighth annual reunion will be held 23, 24, 25 and 26 September at Hotel Statler, New York. For further information write to Al Duke, 3150 Bailey Ave., Bronx, New York, N. Y., or to James (Pappy) Greenwood, 147 Bathhurst Ave., North Arlington, N. J.

• *Army and Navy Legion of Valor*—The 64th annual reunion will be held 11, 12, 13 and 14 July in Los Angeles, Calif. Headquarters will be the Statler Hotel. Reunion chairman is Peter P. Martinek, 1731 S. Brand Blvd., Glendale, Calif.

• USS *Enterprise* (CV 6)—A reunion will be held 4 and 5 September in Chicago, Ill. All interested contact M. S. Cochran Jr., 244 E. Pearl St., Findlay, Ohio.

• *VP* 772—All hands who served in VP 772 and are interested in a reunion 5 September in the Los Angeles area, contact Joe Pummill, 722 "A" Pilgrim Drive, Santa Barbara, Calif.

• USS *General T. H. Bliss* (AP 131)—Anyone who served in *Bliss*, between 1944 and 1946 and is interested in a reunion on or about 1 September, write to D. C. Campau, 6023 MacArthur Blvd., Oakland, Calif.

• USS *Indianapolis* (CA 35)—Those who served in *Indianapolis* from 1942 to 1945 and are interested in a reunion, with time and place to be decided, contact William R. Roberts, 6131 Long, Shawnee, Kansas.

USS ELDORADO (AGC 11), typical amphibious force flagship, carries the communications equipment necessary for large-scale, combined operations.

Training Courses for Advancement

SIR: There is a rule in effect on my ship that a man must have successfully completed a correspondence course as one of the requirements for advancement in rating. Is this a local ruling or is it a Navy-wide practice? It is my understanding that successful completion of a Class "A" school fulfilled the requirements for advancement to PO3 and PO2 as far as instructions in rate are concerned.—A. T., SN, USN.

• *Training courses for individual rates and ratings are listed in the current edition of "Training Courses and Publications," NavPers* 10052-A. *Those courses marked with an asterisk (*) are a prerequisite to taking an examination for advancement in rating. However, a correspondence course which is based on the training course may be substituted.*

Satisfactory completion of a Class "A" school may be considered as satisfying the requirements for completion of the training course for the applicable pay grade E-4 *rate, according to para.* 8d, *BuPers Inst.* 1414.2. *Class "A" school completion, however,* does not *satisfy the requirements for the General Training Course for petty officers.* —ED.

Entitlement to MOP

SIR: What's the scoop on mustering out pay in my case? In 1953 I agreed to extend for one year, the extension becoming effective in 1954. I was advised that I would be paid MOP when my extension became effective. That time arrived and I checked with the disbursing office but they tell me that I have to wait until my extension is over before I get the money. There are a lot of other friends of mine in the same boat who would appreciate a straight answer on this subject—W. J. B., AC2, USN.

• *Your disbursing office was right. Entitlement to Mustering Out Pay accrues only upon discharge from the regular Navy or final release from active duty in the Naval Reserve. As you were not discharged upon extension of enlistment in May* 1954, *entitlement to MOP did not accrue.*

You will receive MOP, if otherwise entitled, upon discharge from your current extension.—ED.

Authorization for Korean PUC

SIR: I would like to know the correct order that I should wear the United Nations ribbon, Korean Service ribbon and the National Defense ribbon. Also has the Korean Unit Citation been officially accepted for naval personnel?—W. A. R., YN2, USN.

• *In accordance with Uniform Regulations the correct order should be: National Defense Service Medal, Korean Service Medal and United Nations Medal.*

Public Law 354 *approved* 8 *May* 1954 *permits the acceptance of foreign decorations for Korean action after* 26 *June* 1950, *including the Korean Presidential Unit Citation. The Bureau will promulgate this information at an early date.*

When the information is available, ALL HANDS *will publish a complete rundown of the various ships and units entitled to the Korean P.U.C.*—ED.

How Oceans Get Their Permanent Waves

Two of a sailor's constant companions at sea are waves and wind. Day in and day out, in some shape or form, these two move with the ship—or against it. They pound unmercifully on the bow, stern or sides.

At first glance a wave may appear to be merely a large collection of water rolling across the top of more water. However, careful observation will show that actually the water in a wave has little forward motion.

The movement is in a circular or rippling motion much the same as a bull whip which has been cracked. When you crack the whip, the ripple runs down the whip but the individual portions of the whip do not move forward at all, just up and down. This is similar to the motion of water of a wave.

Waves are formed in a number of different ways. A stone dropped in a pond will cause one; so will a speeding ship. Such waves are of short duration—they soon run into other forces which overcome them, such as the friction of the water, or "wind waves." These wind waves may be smaller than the waves caused by a ship's passage but the force behind them remains constant while the motivating force behind the "wake waves" ceases. In other words, the wake wave disappears because it is born in a "dispersive medium," and internal friction and air friction dissipate its energy. The wind wave receives a constant supply of new energy from the wind, as long as it continues to blow in the same direction.

Wind waves are the most familiar type and appear as a series of irregular crests separated by intervening troughs. They advance like so many lines of soldiers across the sea, often stretching from horizon to horizon. Their size is governed by the force and duration of the wind and they range in size from small ripples to waves as high as a ten-story building.

One characteristic of wind waves that makes submariners happy is that the effect of waves decreases rapidly below the surface. The length of the wave is important in determining its underwater effect. Generally a wave is considered negligible at a depth equal to half its wave-length (distance from crest to crest). Thus, while the ships of a task force may be catching all sorts of rough seas, the submarine and its crew can submerge below the waves' effective depth and ride out the storm.

It has been pretty well agreed that the gustiness of winds sets waves in motion. However, the mechanism by which waves form has not yet been solved. Somehow wavelets occur. Once they do scientists understand how they grow. When a wave has started, it will continue even without the wind unless there is some obstacle in its path, such as wind from a different quarter.

The roughest types of waves a sailor is likely to encounter are the wind waves caused by a hurricane or typhoon, although these waves are not always the highest. In late 1944, for example, Admiral William F. Halsey, Jr., USN, and his Third Fleet met up with a typhoon off the Philippines which dogged their trail and finally unleashed a blast that sank three destroyers and did untold damage to other ships.

There is also the story of USS *Warrington* (DD 383). In a hurricane off the Florida coast in the same year she was literally blown to bits and sunk. For two days the staunch destroyer battled the elements and her crew fought with tireless energy. But the storm had all the better of it and one huge sea slapped the ship on her side, flooding the engine-rooms and causing loss of power. That was the end. A total of 251 men and officers were lost.

The terrific winds in such a storm cause waves to grow to great heights. Combined with the stress and strain of the accompanying winds, they can cause great damage. The only way to avoid a rough time in such a case is to get out of the storm, but that is much easier said than done as both hurricanes and typhoons often change course without warning, catching ships and cities unprepared for their destructive force.

At first glance it seems strange that the biggest waves do not always occur in these giant tropical storms. The reason is rather simple. The height of a wave is determined by the strength of the wind blowing on the water combined with the length of time and distance a wind of any given force has been acting on it. The length of time which a wind has been acting upon a wave is a direct result of the distance that the wind has been blowing in one direction. Since high winds do not instantly start high waves this becomes obvious.

The technical term for the distance a wind has been blowing upon a wave is "fetch." The longer the fetch, the bigger the wave. This means then, that large waves can only develop in comparatively broad bodies of water.

Take a case where the wind is coming from a large body of land. Discounting surf, which is a complete study in itself, the water near the shore will not have very large waves. Yet the farther you go toward sea the larger the waves.

As a result, it is easy to see why waves grow to much greater proportions in some parts of the ocean than in others. The wind has much longer distances to act on the water.

Getting back to typhoons and hurricanes, we can now see why they do not generate the highest waves. Actually, these storms do not blow long enough in any one direction. Should they, the resulting waves might be the highest ever recorded, but they invariably turn and twist as they work their way to shore.

Generally waves are no higher than 12 or 15 feet anywhere, and anything over 20 or 25 feet is unusual. However, that is not to say that waves do not go higher.

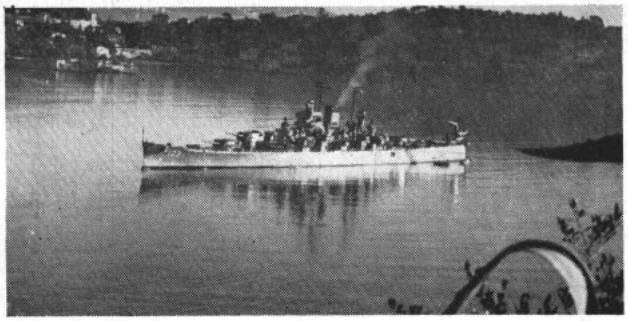
It has been hard to evaluate reports of record waves, because of the difficulty of measuring them. In a storm big enough to produce record waves, no one is apt to be standing out on the decks with a tape measure!

Waves of 60 feet have been encountered by numerous ships in the North Atlantic but what has been conceded to be the best-measured and largest wave is one encountered by the USS *Ramapo* (AO 12) in the North Pacific in February 1933.

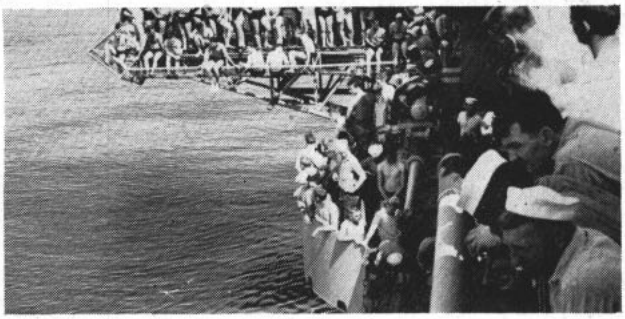
For seven days the ship had been bucking stormy weather. The storm had a fetch of thousands of miles. One night during the worst of the storm one of the officer's saw a great sea rising astern at a level above an iron strap on the crow's nest of the mainmast. *Ramapo* was on an even keel and her stern was in the trough of the sea. These circumstances made

(*Continued on page* 34)

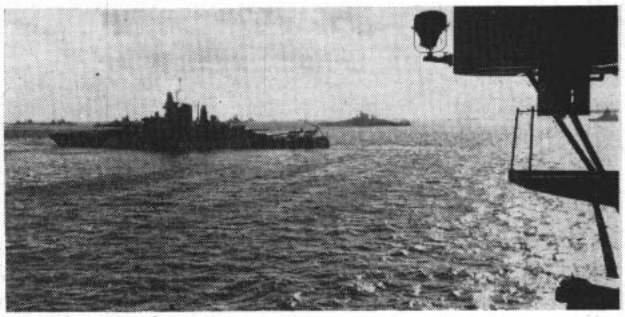
THE EFFECT OF WIND AND WA



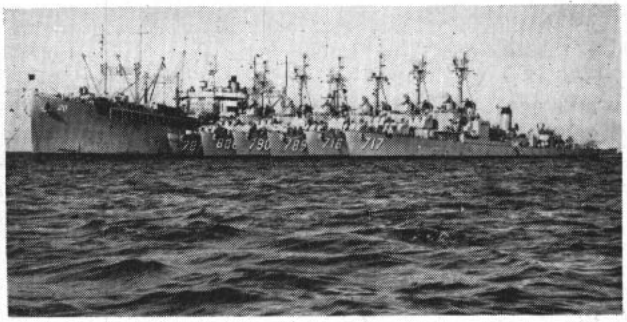
Beaufort Scale 0



Beaufort Scale 1



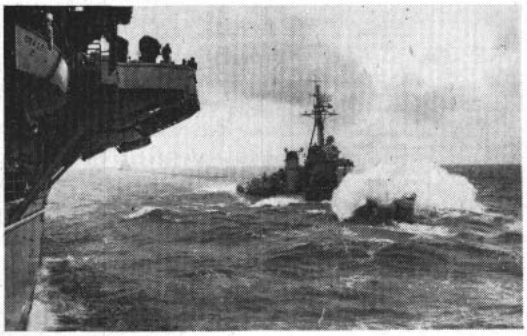
Beaufort Scale 2



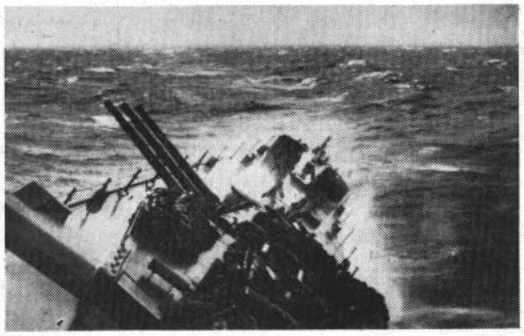
Beaufort Scale 3

WIND FORCE (Beaufort Scale)	Weather MAP SYMBOL	Seaman's DESCRIPTION OF WIND	Terms used by WEATHER BUREAU	Wind Velocity MILES PER HOUR	Wind Velocity KNOTS	Estimating Wind Velocities ON LAND
0	◎	Calm	Calm	Less than 1 mph	Less than 1 knot	Calm; smoke rises vertically.
1		Light Air	Light	1 to 3 mph	1 to 3 knots	Direction of wind shown by smoke drift but not by windvanes.
2		Light Breeze		4 to 7 mph	4 to 6 knots	Wind felt on face; leaves rustle; ordinary vanes moved by wind.
3		Gentle Breeze	Gentle	8 to 12 mph	7 to 10 knots	Leaves and small twigs in constant motion; wind extends light flag.
4		Moderate Breeze	Moderate	13 to 18 mph	11 to 16 knots	Raises dust and loose paper; small branches are moved.
5		Fresh Breeze	Fresh	19 to 24 mph	17 to 21 knots	Small trees in leaf begin to sway; crested wavelets form on inland waters.
6		Strong Breeze		25 to 31 mph	22 to 27 knots	Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty.
7		High Wind (Moderate Gale)		32 to 38 mph	28 to 33 knots	Whole trees in motion; inconvenience felt when walking against wind.
8		Gale (Fresh Gale)	Gale	39 to 46 mph	34 to 40 knots	Breaks twigs off trees; generally impedes progress.
9		Strong Gale		47 to 54 mph	41 to 47 knots	Slight structural damage occur (chimney pots and slates re moved).
10		Whole Gale	Whole Gale	55 to 63 mph	48 to 55 knots	Seldom experienced inland; tree uprooted; considerable structura damage occurs.
11		Storm		64 to 72 mph	56 to 63 knots	Very rarely experienced; accom panied by widespread damage
12		Hurricane	Hurricane	above 72	64 and above	

Prepared by ALL HAN



Beaufort Scale 8

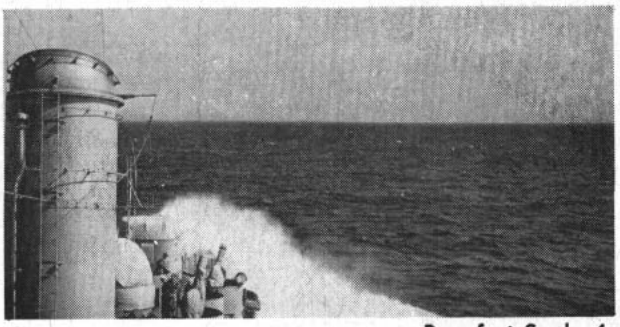


Beaufort Scale 9

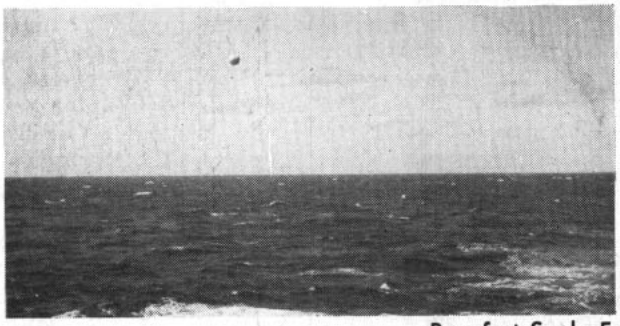
Beauf

VES ON THE SEA AROUND YOU

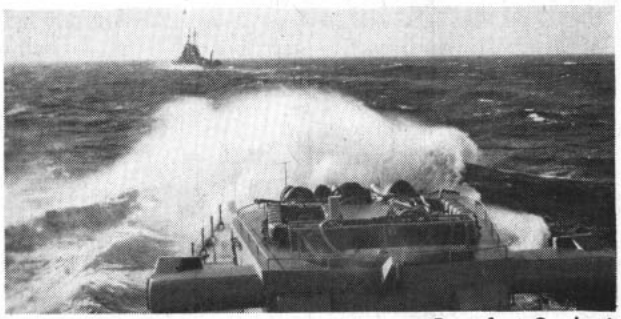
Estimating Wind Velocities ON SEA	U. S. Navy Hydrographic Office SEA DESCRIPTION and WAVE HEIGHTS in feet	U. S. Navy Hydrographic Office SEA STATE CODE	International Scale SEA DESCRIPTION and WAVE HEIGHTS in feet	INTERNATIONAL CODE for STATE OF SEA
Calm. Sea like a mirror.	CALM 0	0	CALM GLASSY 0	0
Light Air. Ripples—no foam crests.	SMOOTH Less than 1 foot	1		
Light Breeze. Small wavelets, crests have a glassy appearance and do not break.	SLIGHT 1 to 3 feet	2	RIPPLED 0 to 1 foot	1
Gentle Breeze. Large wavelets, crests begin to break. Scattered whitecaps.	MODERATE 3 to 5 feet	3	SMOOTH 1 to 2 feet	2
Moderate Breeze. Small waves becoming longer. Frequent whitecaps.	ROUGH 5 to 8 feet	4	SLIGHT 2 to 4 feet	3
Fresh Breeze. Moderate waves, taking a more pronounced long form; many whitecaps, some spray.			MODERATE 4 to 8 feet	4
Strong Breeze. Large waves begin to form; extensive whitecaps everywhere, some spray.			ROUGH 8 to 13 feet	5
Moderate Gale. Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.	VERY ROUGH 8 to 12 feet	5	VERY ROUGH 13 to 20 feet	6
Fresh Gale. Moderately high waves of greater length; edges of crests break into spindrift. The foam is blown in well-marked streaks along the direction of the wind.				
Strong Gale. High waves. Dense streaks of foam along the direction of the wind. Spray may affect visibility. Sea begins to roll.	HIGH 12 to 20 feet	6		
Whole Gale. Very high waves. The surface of the sea takes on a white appearance. The rolling of the sea becomes heavy and shock-like. Visibility is affected.	VERY HIGH 20 to 40 feet	7	HIGH 20 to 30 feet	7
Storm. Exceptionally high waves. Small and medium sized ships are lost to view for long periods.	MOUNTAINOUS 40 feet and over	8	VERY HIGH 30 to 45 feet	8
Hurricane. The air is filled with foam and spray. Sea completely white with driving spray; visibility very seriously affected.	CONFUSED	9	PHENOMENAL over 45 feet	9



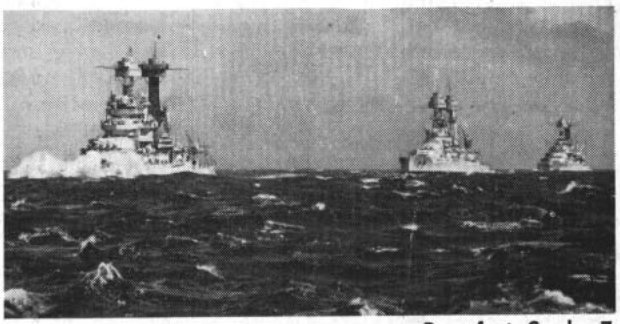
Beaufort Scale 4



Beaufort Scale 5

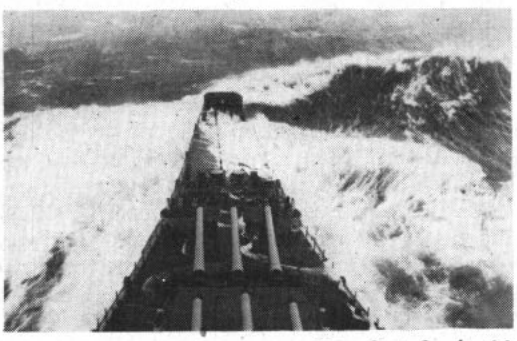


Beaufort Scale 6

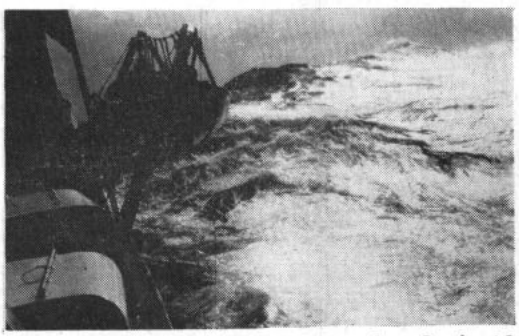


Beaufort Scale 7

Scale 10



Beaufort Scale 11



Beaufort Scale 12

possible an exact line of sight from the bridge to the crest of the wave so simple mathematical calculations based on the dimensions of the ship gave the height of the wave. It was 112 feet!

While measuring waves is quite a technical job, measuring the winds that are causing the waves is rather simple. The method was introduced by Admiral Beaufort of the British Navy in 1805 and is still in use by navigators today.

Originally, the Beaufort scale was based on the amount of sail a full rigged man-of-war could carry. This ranged from "all plain sail and studding sails" (Force 1) to "scudding under bare poles" (Force 12). Also included in the scale was the "seaman's eye" description of the corresponding sea surface.

Many years later, development of the anemometer made it possible to specify wind speeds on the Beaufort scale. Since there is a drag between the wind and the sea surface it is necessary to specify the height at which you measure the wind velocity above the waterline. The higher above the water you are, the higher is the wind's speed. A height of 33 feet above the water is usually specifield.

The Beaufort scale, which is shown elsewhere in this article, is based upon the numbers (at the left) expressing the equivalent wind velocities in miles per hour. A little study of this might enable you to amaze your shipmates by giving them a good estimate of the winds.

One time this system will fail is when you see *swells* instead of *waves*. These can be present without any wind at all or even running against the wind. They are the result of a wind disturbance farther away and often reach great size.

As to swells, this is what happens. You might say that a swell is a wave separated from the wind that created it When the wind stops, waves continue until they meet an opposing force. If there is no opposing force, they keep moving until run ashore. Moving forward at a steady rate without wind, they become swells.

Since swells develop from waves, their movement and pattern is governed by these waves. The speed with which waves advance is dependent upon wave length. The longer the wave, the faster it moves. Away from the wave's original "area of generation," the swell that has developed from the waves has a regular pattern, with waves all very nearly the same length.

The outstanding characteristics of a swell, as contrasted with a wave, are its low rounded crest, the comparative smoothness of its surface contours and its great length from crest to crest. Swells may be separated by as much as 80 to 1000 feet or more.

How fast do waves move? The answer to this question is complicated by the fact that waves have two speeds or velocities—a "group velocity" of a series of waves and a velocity for each individual wave in that series. The "group velocity" of the series is just half the forward velocity of the individual waves. For example, if a storm 500 nautical miles from a coast generates a series of waves that move individually at 25 knots, when will the waves reach the beach? Although you would think that they would hit the beach in 20 hours, it will actually require 40 hours, based on the waves' group velocity.

From the bow of your ship you can see another good example of waves' group velocity. The waves created by the forward movement of the ship do not extend out from the bow in a long "V" as might be expected. Instead, the crests of each wave disappear and reappear *behind* the position of the original crest, forming something that looks like a herring-bone pattern. The energy of each wave is still conserved, but the group of waves moves forward at half the velocity of the individual waves.

Besides waves and swells there are two terms that the Navyman hears quite often—they are "ground swells" and "tidal waves."

• You'll see a good example of a *ground swell* along a coast where the ocean bed is not far below the surface for a long distance from the land. A ground swell is the seaman's term indicating the fact that as a wave passes into shoal water (that is, water which has a depth of less than half a wave length) the wave's length decreases and its height increases. At first there is a slight *decrease* in the wave's height, but as the water shoals further, there is a considerable increase. The result is a shorter steeper wave, much more perceptible than it was in deeper water.

To a man on board ship, the observation of ground swell is generally a sign of running onto "soundings." To an observer ashore, it is often taken as a forerunner of a storm, since the long swell produced by a storm often travels faster than a storm itself.

• The *tidal wave* is probably the most widely known type of wave. To give it its correct title, you should call it the "seismic sea wave" since it is not related to tides at all. History is full of references to these mighty omens of misfortune as they have in the past devastated entire coastal cities, left ships high and dry on the beach more than a quarter of a mile inland, and have taken untold lives.

Most seismic sea waves are born in the deep trenches of the ocean floor. Earthquakes under the water produce the initial shock that sends unharnessed energy flooding across the water until it reaches some faraway beach.

In 1946 the natives of Hawaii were alarmed when the breakers were suddenly stilled. The water had withdrawn past the reefs. They didn't know that this recession of the water from the reefs and shallow coastal waters was the sea's reaction to an earthquake on the floor of the ocean more than 2000 miles away.

When the crest of the wave did come it rose more than 25 feet above the normal level of the tide. Houses were carried out to sea and in some areas large rocks and blocks of concrete were carried out onto the reefs.

The most amazing part of a seismic sea wave is the fact that mariners on the open seas wouldn't even notice the wave unless they had been alerted. The waves produced in the Hawaiian disaster for instance, were only about a foot or two high on the open ocean, but their length was nearly 90 miles between crests. When that energy piled up water on the beach it brought disaster.

Another fantastic bit of information about ocean waves is that they are loaded with gold. Man has known this for years but has never been able to devise a way for profitable extraction of the precious metal.

It may be a pleasing thought to consider that you have sailed over as much gold as you have. There is about $93,000,000 in gold and $8,500,000 in silver in a cubic mile of sea water. Figure how much sea water you have sailed over and multiply it by those figures. Make you feel richer?

—Bob Ohl, JO1, USN.

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★

One-Man Bomb Disposal Team

One man who never wants to get a big bang out of his work is Chief Gunner Kenneth A. Ballew, USN. He's a one-man Bomb and Mine Disposal Team on Guam.

Today, nearly 10 years after the historic shelling and invasion of Guam, Chief Gunner Ballew is on a call schedule 24 hours a day, seven days a week, ready to answer requests to pick up or explode stray mines and bombs.

Almost constant reports flow in from construction outfits turning up a Japanese shell, or from Guamanian farmers uncovering mines in their field. Fires which light off in the swamps explode some of the missiles and bare others. Weather and erosion open up many a cave, lost since World War II, which may be loaded with grenades, anti-personal mines and the like.

Some of these explosives are particularly dangerous. Many of the larger pieces were partially armed in flight and the slightest jar could set them off. The smaller stuff has rusted and it is possible that inner chemical actions brought about by temperature changes might set them off at any time.

Needless to say Chief Gunner is very careful.

One of his most touchy jobs came about when a road grader clipped off parts of the nose fuses of two aerial bombs. The missiles had been converted into use as mines, being vertically buried and perhaps wired at one time.

The shells were too close to construction and inhabited areas to be blown up on the spot so they were hoisted aboard a weapons carrier. A surveyed Navy mattress provided the hoped-for and successful cushioning against shock, and the trip was successful. However then, as now, everyone gave Chief Gunner Ballew plenty of room as he went down the highway with siren screaming and a big red light flashing.

It's all in a day's work, but his respect for his working material, whether it's a 20mm shell or a 1000-pound bomb, is immense. Small wonder.

GLOBE-CIRCLER—*USS Jas. C. Owens* (DD 776), once reported as 'sunk' by the North Koreans, has completed her second 'round-the-world cruise in two years.

Salem Men of Good Will

The heavy cruiser USS *Salem* (CA 139) has chalked up another entry in its log of international good deeds.

Salem distributed six and one-half tons of canned milk to the victims of the earthquake disasters of Greece. The canned milk, donated by Boston's Greco-Americans, was carried abroad in extra cargo space in the cruiser.

Also on board *Salem* were three tons of clothing collected by the people of Salem, Mass. Cruiser men distributed this clothing to orphanages in France.

This was not the first time *Salem* has participated in a relief mission. Last year, while the cruiser was conducting maneuvers in the Mediterranean, the Greek islands were torn by similar earthquakes. *Salem* immediately rushed food supplies, medical assistance and relief parties to the aid of the quake victims.

Birthday Mess

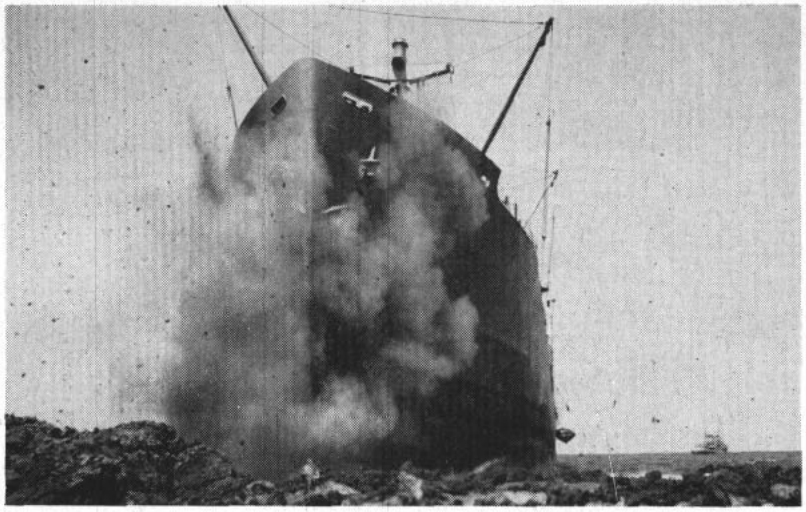
On board USS *Toledo* (CA 133) a "Birthday Mess' has been installed for crew members.

Each Wednesday, all men whose birthdays occurred during the previous week gather in the "Birthday Mess" for a special dinner. Thick steaks cooked the way the individual wants them, french fries, pie, ice cream and a big cake are all on the menu. The ship's good china and the fancy silverware, seldom used at sea, are used for the occasion.

Following the meal each man is presented with a colorful menu.

YESTERDAY'S NAVY

On 11 July 1798, the Marine Corps was permanently established as a part of the Navy. Congress created the grade of Rear Admiral, 16 Jul 1862. The first naval officer to become Admiral was David Glasgow Farragut, appointed 25 Jul 1866. On 31 Jul 1944, *USS Parche* and *USS Steelhead* launched a 46-minute attack on a Japanese convoy to sink or damage seven large enemy ships. U. S. armored cruiser *San Diego* was mined and sunk off Fire Island, 19 Jul 1918. Congress established the Bureau of Aeronautics as part of the Navy Department, 12 Jul 1921.



NAVY SALVAGE TEAM blasts away jagged rock formations, freeing *SS San Mateo Victory*, which had gone aground at Cheju-do, Korea.

ARS Salvage Vessels Rescue Merchant Ship

After a month-long struggle the officers and men of the salvage vessels USS *Safeguard* (ARS 25) and USS *Grasp* (ARS 24) and the fleet tug USS *Takelma* (ATF 113) succeeded in refloating SS *San Mateo Victory*, a merchant ship which had run aground in a fog. She was on the north coast of Cheju Island, south of Korea.

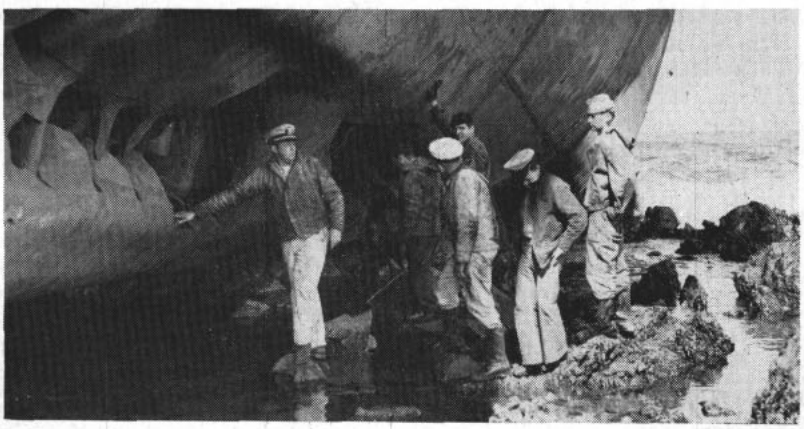
The freighter was grounded "high and dry"—three-quarters of her weight resting on rocks.

After a quick inspection, a Navy salvage officer determined that although large holes had been torn in the freighter's hull by jagged volcanic rocks, enough buoyancy could be obtained to float her without extensive repairs. However, there was the problem of removing the rocky pinnacles which had broken through the ship's hull and the task of clearing a channel.

Crews from the two salvage ships worked nearly round-the-clock for a month, stopping only when heavy seas, squalls or high tides kept them from their work.

Beaching gear was fanned out from the *San Mateo Victory* to maintain control of the stranded vessel, while a tow cable was run out from *Grasp*. Sailors used sledge hammers and pneumatic drills to cut away the stubborn rock, while Navy divers planted dynamite charges in the underwater coral.

Finally, *Takelma* took over the tow line for the "big pull' and the *San Mateo Victory* inched off her rocky mooring toward the open sea.



HOLES ripped in side of 8000-ton merchant ship are examined by CHMACH Don T. Pickford, USN (left) and group of Navy salvage experts.

War College's 'Fleet Week'

The U. S. Naval War College, Newport, R. I., held its second annual "Fleet Week" recently.

Concurrent with other Fleet Week features was an Atlantic Fleet Type Commanders Conference attended by Navy and Marine Corps officers.

Fleet Week has been instituted at the Naval War College to enable officers, particularly in the junior grades, from the Fleet and shore activities of the Newport area to learn of the facilities and objectives of the school.

These officers attended lectures of outstanding professional interest during the week while the Type Commanders held closed sessions discussing problems in connection with personnel, operations, combat readiness, training, the employment of the Fleet units and allied subjects.

Several units of the Atlantic Fleet, including USS *New Jersey* (BB 62) and USS *Worcester* (CL 144), were in port during the week and were open to visitors.

Admiral Wright New SacLant

Admiral Jerauld Wright, USN, has assumed duties as the new Supreme Allied Commander, Atlantic, succeeding Admiral Lynde D. McCormick, USN, who now heads the U. S. Naval War College, Newport, R. I.

Prior to Admiral McCormick's relinquishing the high NATO command, a group of Norfolk citizens presented "SacLant" with a plaque commemorating the establishment in 1952 of the Allied Command Atlantic in Norfolk.

The plaque carries the official seal of the city of Norfolk and the official SacLant emblem. It has been mounted in front of SacLant headquarters.

Prior to taking over his NATO command, Admiral Wright had been Commander in Chief, U. S. Naval Forces, Eastern Atlantic and Mediterranean with headquarters in London, England.

Seabees Build Sickbay

The "Can Do" Seabees have done it again.

This time at Camp McGill, Japan, where they consolidated, in record time, four Navy Medical Units into one large sick bay—one of the most modern in Japan.

From humble beginnings in an old messhall, the new sick bay grew into being quickly as the Seabees went to work in their own speedy

fashion and whipped up a 14-room building which includes examining rooms, offices, a dental lab, a darkroom and storerooms.

When the building was ready for the different medical units to move in, the Seabees worked hand-in-glove with the medical personnel and the move was completed without missing a sick-call. Everything from a cold to a broken leg was treated without interruption.

'MINSY' Celebrates Birthday

The U.S. Navy is joining forces with the city of Vallejo, the county of Solano and the state of California for a big celebration in honor of the 100th anniversary of the Mare Island Naval Shipyard September 16-19.

The first Navy installation on the Pacific Coast, Mare Island was commissioned by Commander David G. Farragut, USN, who later rose to admiral and achieved fame in the Civil War.

In addition to staging an open house, the Centennial committee hopes to have many high ranking U.S. officials present. Vice President Richard Nixon, Naval Reserve Lieutenant Commander, has assured the committee that he will be on hand for the occasion.

A display of the Navy's fighting forces will be shown and several foreign nations whose ships have been repaired at Mare Island have indicated they also will send ships to the celebration.

Navy Drill Team Wins Honors

The Drill Team from the Ceremonial Guard Unit at the Washington, D. C., Receiving Station, one of the finest drill teams in the Navy, won the drill contest in the ninth annual Washington Crab Apple Festival. This is the fifth consecutive year that the Navy Drill team has walked off with top honors.

The Navy team was in competition with other drill teams from the Ceremonial Guard Units of the Army, Marines and Air Force. The Navy outfit was labeled the "show-stopper" of the Festival as they snappily executed their intricate formations and precision rifle twirling.

Drillmaster for the Navy drill team is P. L. Sutton, BM3, USN. W. T. Pryor, GMC, USN, is chief-in-charge of the team, which is composed of volunteers from the Navy's Ceremonial Guard Unit.

THE JOB of landing a helicopter on an LST calls for a high degree of skill, which can be attained only through training and practice.

LSTs and 'Copters Make a Working Team

Teaming the Landing Ship Tank with the helicopter sired a combination that was so successful in the Korean War that the whirlybirds are getting to be a regular feature aboard many LSTs.

In the Korean war the helicopters were used aboard LSTs to spot enemy mines for the minesweepers, for reconnaissance duty, for carrying wounded personnel from the mainland and for rescuing airmen downed in the waters off Korea. For example, the helicopter from USS *LST* 799 rescued seven downed airmen in one morning with a total of 23 rescues in 10 missions in addition to spotting and leading to the destruction of about 50 enemy mines (ALL HANDS, November 1952, p. 38).

Now the Amphibious Operation Training Element, U. S. Atlantic Fleet, Little Creek, Va., is teaching LSTs to land and launch helicopters. Other amphibious ships capable of operating with helicopters are AGCs and LSDs.

THAT'S NO AIRCRAFT CARRIER! Helicopter comes in for landing on *LST 938* off Cape Henry, near U. S. Naval Amphibious Base, Little Creek, Va.

MARBLE TEAM—C. A. Cushman, YNSN; B. L. Parsons, YNSN; N. C. Drummond, YN1; R. J. Murphy, YNSN; and B. L. Haggard, GM3, (l-to-r), train for tourney.

Navymen Knuckle Down

The "Tigers" roared and the "Bullets" misfired as a team of U.S. Navymen went down to defeat in the Annual English Marble Championships at Tinsley Green, England.

The Navymen, attached to U.S. Navy headquarters in London, tagged themselves as the "Grosvenor Bullets," praticing their fast balls and knucklers weeks ahead of time.

Led by George Smith, YNSN, USN, who last year headed another team which also met defeat in the tourney, the sailors were certain that this year they had the team to beat.

The "Tinsley Tigers," headed by 82-year-old "Pop" Maynard, acknowledged World Champion marble shooter, evidently thought the sailors were the team to beat too—they did just that by a score of 33-16.

As the game opened, the two captains, "Pop" and "Smitty," urged their teams on before a tense crowd of nearly 1000. Shooting on a ring made of concrete and raised off the ground some six inches, the "Tigers" went ahead seconds after the first "aggie" was tossed in the ring.

It wasn't long before the crowd could see that the Tigers' experience (they averaged 65 years of age against the sailors' average of 22 years) was more than enough to offset the youngsters' hard practice.

When the dust settled the champions had safely protected their crown and the Navymen returned to London *sans* laurels.

Last year the Navymen were scuttled 38-11. However they gained some consolation when Smith scored an amazing upset over "Pop" Maynard in a special singles match. This year there was no singles match.

In addition to Smith, other members of the team were: Bernard L. Parsons, YNSN, USN, a holdover from last year's team; Bruce L. Haggard, GM3, USN; Nelson C. Drummond, YN1, USN; Charles A. Cushman, YNSN, USN; Richard J. Murphy, YNSN, USN.

Arresting Cables Go Ashore

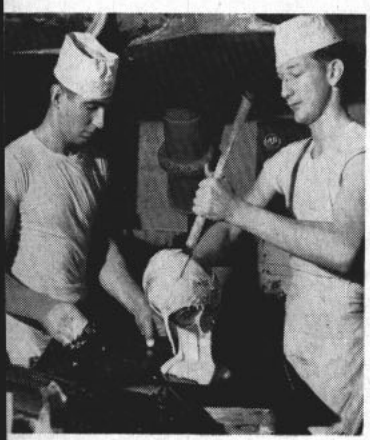
Naval air stations in the U.S. are stealing a page from carrier aviation's book and installing emergency arresting cables on their runways.

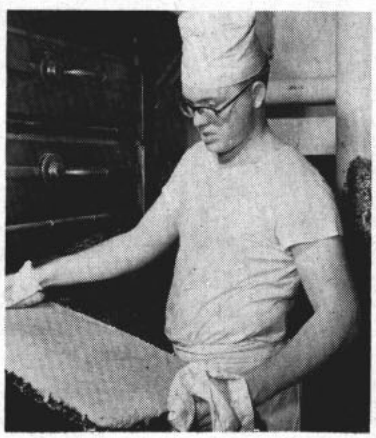
They are being installed to combat the problem of having aircraft with malfunctioning flaps, lost wheels, faulty brakes and other troubles, run off the end of the runways when forced to land.

Typical of the gear being installed is that which is at present in use at NAS Jacksonville, Fla. The new gear consists of two parallel carrier-type landing cables 20 feet apart on each runway. Stretched across the runways by turnbuckles and connected at each end to two 750-foot lengths of anchor chain, they do the trick.

Approximately 35 naval and Marine air stations have had the emergency runway arresting gear installed and an unofficial survey of these stations indicate that air stations can expect to handle between 200-300 emergency "arrestments" per year.

IT WAS HER NINTH BIRTHDAY—so they baked a cake. Batter goes into pan as cake for *USS Boxer* (CVA 21) gets underway (left). First pan of cake comes from oven (center). Bakers pour first ladle of icing on 'growing' cake.





Monday Is Wash Day for VR-8

Out Pearl Harbor way, VR-8 had two big problems. The fighter squadron men had a washing machine they didn't need and a lot of oil strainers they had trouble getting clean.

After a little thought on the subject they came up with a solution to both problems—they fixed up the washing machine as an oil strainer cleaner. Now everyone is happy.

The strainers, consisting of many doughnut-shaped rings, previously had to be cleaned individually by hand during each periodic aircraft check. That took a lot of time.

Now with the simple construction of five lead pipes welded around the spinner of the washing machine, five of the strainers can be turned out in five minutes.

The strainers are swished from a fixed position in the washer. They are straddled around the pipes and in a solution of gunk and solvent are cleaned fifty times faster than before with a thoroughness that could never be achieved by hand.

Long Voyage Home

A routine visit of USS *Randolph* (CVA 15) to Salonika, Greece, proved to be the culmination of one sailor's dreams. He was returning home after an eight years' absence.

Demetrios Pilitsis, HM3, USN, wasted no time when the carrier docked in Salonika. He headed straight for the small village of Livadakion, just 11 miles from Salonika. The entire population, led by his mother and grandmother, turned out to greet him.

Pilitsis had left Greece for the U. S. in 1946. His entry had been arranged by the American consulate in Greece. The consulate became interested in the boy when his father, a naturalized American citizen, was killed during World War II.

Once in the U. S., Pilitsis stayed with old friends of his father until he had graduated from high school. With school days behind him, he joined the Navy and had been waiting and hoping for his ship to take a Mediterranean cruise on the chance that he might get to return to his home.

Their Sailing Days Are Not Over

In this age of atomic submarines and fast carriers it is pretty rare to find a "sailing ship" in the U. S. Navy. However, the crew of USS *E-PCE (R) 852* agree that a sail is a pretty handy thing to have aboard ship. They have used it in one emergency and are ready to do so again if the need arises.

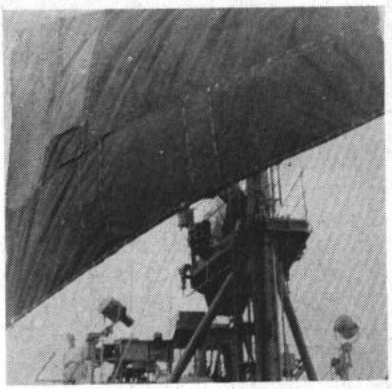
The "852" was in the West Indies, when she started to limp along on one engine. The other engine was dead and she was traveling five knots below her normal speed. Her destination, New London, Conn., was 1100 miles away.

The commanding officer solved the problem in a time-tested, if unique, fashion. All available canvas aboard was collected and the boatswain's mates sewed it together into a patchwork sail.

It took 24 hours to ready the sail and all hands were on deck when it came time for the test. As soon as the sail was rigged, the canvas caught the wind and the "852" took off like a flying fish, arriving in port in good shape.

However, not all of the Navy's sailing ventures turn out so well.

USS *Chourre* (ARV 1), built for utility, not for speed, was cruising along at 10 knots on a 4700-mile voyage from Tokyo to San Francisco when the ship's skipper decided to give the crew and the ship a "lift."



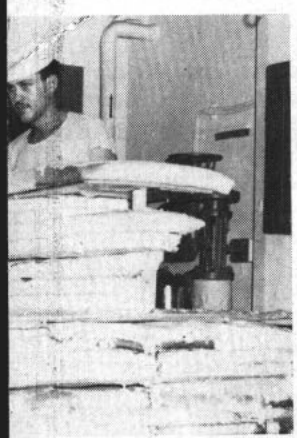
IMPROVISED SAIL helped speed *USS E-PCE(R) 852* to home port when one of her engines failed.

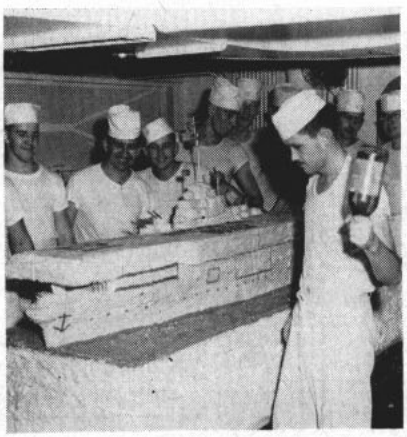
He ordered improvised sails hoisted fore and aft. As if to urge the ship on, the crew painted the words "California or Bust" on the sails.

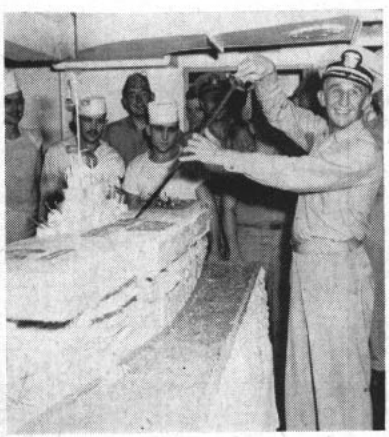
"With a strong blow," the captain said, "we picked up an additional two-and-one-half to three knots, but the winds weren't favorable for most of the trip."

It still took 18 days before *Chourre* sailed through the Golden Gate.

LAYERS making up replica of carrier are shaped up (far left). Cake is 'launched' with bottle of vinegar. CAPT. E. B. Moore, USN, *Boxer's* CO, uses sword to slice the 1,462-pound pastry. Crewmen enjoy their share of kingsize cake.







SIDELINE STRATEGY

A year ago, if you had told Clifton Eskridge, QMSN, USN, of USS *Glynn* (APA 239) that in 12 months he'd be a leading amateur flyweight, he would probably have thought you were crazy. But that's exactly what he is today—the world-wide Armed Forces Flyweight Champion. Not bad for a kid who has had only 23 fights.

Cliff first got the idea of becoming a boxer when he read in his ship's Plan of the Day that boxers were wanted to compete in the Atlantic Fleet Tournament. Although he'd never boxed before, Cliff had been a better-than-average athlete in his high school days in Cairo, Ill., so he decided to go out for the boxing team.

"I signed up just for kicks, but then, I really became interested in the game," states the new champion. "I received plenty of good pointers from Mr. Gillespie, a jaygee in our ship, and also from all the other coaches I've come into contact with since."

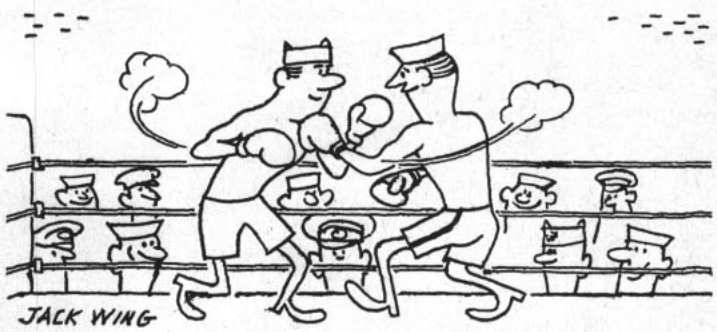
Eskridge learned fast and, with his natural ability, he soon became a formidable contender. The modest, unassuming champion has a natural short right uppercut that thus far has proved lethal to his opponents. A stand-up type fighter, Cliff is also an eager "mixer," but he doesn't like to clinch, as was demonstrated in his championship bout with Jesse Herrera. Not once during the three rounder did the referee have to separate the two Inter-Service fighters.

Cliff's ability can well be measured by the fact that his opponent in the Inter-Service final has been Air Force flyweight champion for the past three years.

Navy coach at the Inter-Service was LCDR "Pete" Culbertson, a naval aviator from Pensacola, Fla. His assistants, who acted as seconds for the fighters, were Don "Bill" Brennan, BMC, USN, of Norfolk Shore Patrol Headquarters and A. G. "Al" Gibbs, FPC, USN, serving in USS *Sierra* (AD 18).

Chico Ayala, a former All-Navy welterweight champion, was eliminated in the Eastern Navy finals but went to the All-Navy and Inter-Service tourneys as an alternate. The other Navy alternate was Henry Brown.

There were two other sailors present at the all-service tournament as alternates too—but for the Air Force team. They were Vincent DiResta, ATAN, USN, and B. O. Yee, ATAN, USN, both attached to VR-8. These two Navy athletes had battled up through the Air Force chain of eliminations because VR-8 is part of PacDiv MATS at Hickam AFB, Hawaii. The Air Force not only had two Navymen on the squad, but also had as the team coach University of Wisconsin's outstanding boxing mentor, Verne Woodward, a lieutenant commander in the Naval Reserve.—Rudy C. Garcia, JO1, USN.



One-Man Track & Field Team

A hot prospect for this year's All Navy and Inter-Service track and field honors in the broad jumping event is Ensign Meredith C. Gourdine, USNR, of USS *Coral Sea* (CVA 43).

Gourdine was runner-up in the 1952 Olympic broad jump with a leap of 24 ft. 7.37 in. and holds the IC4A broad jump record of 25 ft. 9¾ in. He also holds the IC4A runner-up spot for round-turn 220-yard low hurdles with a time of 23.6 sec.

Gourdine is presently attending the Officers Electronics School at Treasure Island, Calif. Before his assignment to school, he was assigned to the Electronics Division aboard the carrier. While his ship was operating with the Sixth Fleet, Gourdine took advantage of the carrier's huge flight deck to keep in shape by running.

When *Coral Sea's* track team entered a meet in Salonika, Greece, Gourdine handily won the 100- and 200-meter dash. In January this year, wearing *Coral Sea* colors, he won the New York Metropolitan AAU broad jump event with a leap of 22 ft. 5 in.

Ensign Gourdine received his degree in physics from Cornell University before being commissioned. He was elected captain of the Cornell track team and was twice selected to the All-American track team.

Hot Soccer Team

The USS *Oriskany* (CVA 34) soccer team has compiled an impressive record over the past few months in the Far East. After losing their initial game to the British ship, HMS *Tyne,* the *Oriskany* "Patriots" won their next six games, and then played a scoreless tie with HMS *Newcastle.*

Led by Lieutenant D. R. Cornish, the booters have improved tremendously since the start of the season. *Oriskany's* soccer record to date, after the opening game loss, includes a 4-1 victory over HMS *Fort Rosalie,* 2-1 win over the Colombian frigate ARC *Almirante Brion,* 4-1 win over HMCS *Crusader,* 7-0 triumph over ROK Navy's PF-61, and upset victories over HMS *Cossack,* 2-1, and HMS *Comus,* 2-0. *Comus* is reputed to have one of the top soccer teams in the Far East.

Oriskany's team has scored a total of 21 goals against the opposition while holding their rivals to only 7. Navymen H. Link and F. Payne share top scoring honors for the team.

THE BULLETIN BOARD

Here's Complete Roundup on Sea/Shore Rotation and the SDEL

The volume of correspondence received in the Bureau of Naval Personnel regarding shore duty indicates that the average enlisted man has a lot of questions on the subject. The following article is printed here with a view to eliminating much of the correspondence as well as some of the many doubts and misconceptions which now appear to exist. Particular attention is invited to the "Question and Answer" portion of the article, in which an attempt has been made to answer the questions that are most frequently asked.

"... and I can't do a thing with it."

THE ROTATION of enlisted personnel from sea to shore for a tour of duty is an important program, directly affecting the morale of a large number of Navymen. A fair and impartial rotation system is of great importance to all naval enlisted personnel.

Before you can get a clear picture of sea/shore rotation—with its different aspects—you must understand the following terms:

• *Bureau Shore Duty*—This is duty assigned by the Chief of Naval Personnel in the allowance of a shore activity within the United States.

• *Fleet Shore Duty*—This is duty assigned by one of the Service Force or Type Commanders in the allowance of a shore based fleet activity within the United States—principally duty in Reserve Fleets.

• *Overseas Duty*—This is duty assigned by Service Force Commanders in the allowance of shore activities beyond the continental limits of the United States, or duty on board non-rotated vessels in the European or Asiatic Areas. Such duty is counted as sea duty for rotation purposes, as is duty performed in vessels which are rotated between overseas and continental U.S. bases, under a rotation schedule controlled by the Fleet Commanders.

• *Shore Duty Eligibility List (SDEL)*—The SDEL is a list of eligible personnel serving at sea *who have requested* a normal tour of shore duty. This list is maintained by rating, and priority on the list is established by the amount of continuous sea duty completed; that is, those who have the most sea duty are highest on the list. Shore duty eligibility lists are maintained by BuPers *for Bureau shore duty* and by the Service Force Commanders *for Fleet shore duty*. Note that the BuPers Shore Duty Eligibility List is different from the SDEL maintained by the Service Force Commanders. In some cases the Service Force Commanders have delegated the responsibility to Type Commanders for maintaining fleet shore duty lists.

• *Normal Tour of Shore Duty* (NTSD)—This is shore duty to which a man has been ordered as a result of his own request after having met the eligibility requirements (including the requirement that he request to have his name placed on the eligibility list). The duration of a NTSD varies from 18 months to three years depending on the rate involved. However, two years constitute an NTSD in the majority of cases.

Shore Duty Eligibility List

The primary purpose of the Shore Duty Eligibility List is to meet the personnel requirements of shore activities with personnel who desire duty within those activities.

The primary requisite for being placed on either the Bureau or Fleet SDEL is the amount of continuous sea duty completed. The sea duty requirements for placement on the Bureau SDEL are based on the ratio of sea duty billets to shore duty billets for the various ratings. The sea duty requirements vary, the lowest being eighteen months and highest four years.

It must be remembered that sea duty required is only the *minimum* for placement on the Bureau SDEL and the fact that this requirement has been met does not mean that a man can expect immediate shore duty orders. He must remain on the Bureau SDEL until such time as a vacancy exists for a man of his rating in the district in which he requests duty. Eligibility requirements for Fleet Shore Duty Eligibility Lists, which have been established by the Fleet Commanders, are, in general, quite similar to those for BuPers Shore Duty. Lengths of tour ashore also closely follow the tour prescribed for BuPers Shore Duty.

Bureau Shore Duty

The basic consideration in making assignments to shore duty is the needs of the service. The number of personnel who can be ordered ashore and the frequency with which they can be ordered are determined by one factor—the ratio of billets ashore to those at sea. The law of supply and demand controls the particular rating groups required ashore. For example, there would obviously be a demand for many more YNs ashore than there would be for BTs or MMs. The result, of course, is the more rapid sea/shore rotation in the case of the YNs.

There are some few activities which, because of their operational peculiarities, are border-line cases as far as their sea/shore rotation status is concerned. In the vast majority of cases no problem is presented in determining just which billets should be considered sea duty and which should be considered shore duty. Before classifying activities as sea or shore for rotation purposes, a careful study is made of the current operations as well as any possible future operations and the decision as to the status of such activities is based upon their actual operations or missions.

Once the billets have been established, the next consideration is to fill these billets with personnel who have expressed a desire for such duty. Based on the needs of the service, the

Bureau exerts every effort to assigning men to shore duty in accordance with their expressed desires.

Since BuPers makes assignments of personnel only to the shore administrative commander (except in a few instances which are discussed below), the latter plays an important part in obtaining for the man the specific duty he has requested. After the Bureau has made a man available to the shore commander who has administrative control over the activity desired by the man, the commander will try to place the man in that particular activity. However, here again the law of supply and demand operates. If the man's services are required in the specific locality in which he wants to serve, the administrative commander will attempt to place him there. If, on the other hand, the member's services are not required in that locality, then the commander is obligated to place him in an activity where his services are required.

On occasion, and this occurs infrequently, personnel are ordered directly (*spotted*) into a specific activity within a naval district. In such cases the Bureau's transfer directive invariably contains authority for the administrative commander to reassign the man within the command if and when he deems such action to be to the advantage of the service. Since this type of direct transfer occurs infrequently and is always occasioned by some specific reason, the administrative commander seldom exercises his privilege of reassignment during the early stages of the man's tour.

There are times when the Bureau's Shore Duty Eligibility List does not contain sufficient requests to meet the personnel requirements of certain areas. This necessitates placing a *draft* on the fleet to obtain the required personnel. Obviously this is not a desirable method of rotation because the possibility of a man obtaining a shore duty billet which, in his opinion would be considered "good duty," is extremely remote. Fortunately cases of this nature are comparatively few in number.

How and when is a request for Bureau Shore Duty submitted? What happens to the request when it leaves the ship? When may shore duty orders be expected? These are questions which, as indicated by the volume of correspondence and personal calls received in the Bureau, are of great interest to the man in the fleet.

Take the hypothetical case of John Smith, SK2, USN, attached to the USS *Blank*. Smith has had continuous sea duty for the past four years. Although eligible for shore duty two years ago he has, for personal reasons, deferred submitting a shore duty request until the present time.

• His first step is the submission of a *Shore Duty Request* (NavPers 2416). Before filling in the required information there are certain decisions that Smith must make for himself.

• Which is the more important to him—does he want shore duty in one specific locality and is he willing to wait many months on the SDEL, if required, to get that locality? Or is his motive to get shore duty as soon as possible regardless of location? If he indicates on his request that he desires duty in only one specific locality, he may select the same district as other SK2s many of whom may have accumulated more sea duty than he.

• On the other hand let us assume that Smith wants his shore duty as soon as possible. He indicates on his request a first choice, a second choice, and then states that he would be willing to accept shore duty "Anywhere in the U. S." Such a request does not tie the hands of the detail officer in BuPers. When he has gained the proper place on the SDEL he is considered for the locality of his first or second choice; if his services are not required in either locality the detail officer will find a locality "Anywhere in the U.S." where Smith's services are required, and orders will be issued accordingly.

• So Smith fills in the shore duty request giving two choices of duty plus the alternative choice of "Anywhere in the U.S."

• His commanding officer endorses the request and forwards it to BuPers.

• Upon receipt in the Bureau, Smith's request is checked for accuracy against information contained in his duplicate service record. The request is then placed in file with the requests from other SK2s ahead of those who have had less sea duty and behind those who have more sea duty.

• Smith is then advised by letter that his name has been placed on the SDEL and that he will be ordered to shore duty at such time as he has advanced to the top of the list and there is a vacancy ashore for a man of his rating.

• Smith's responsibility does not end here. *He must keep the Bureau informed of any change in his status that might occur, for example, change in duty station, change in rate, discharge and reenlistment, and changes in choices of shore duty.* If he should desire placement on another eligibility list (Fleet Shore Duty, Recruiting

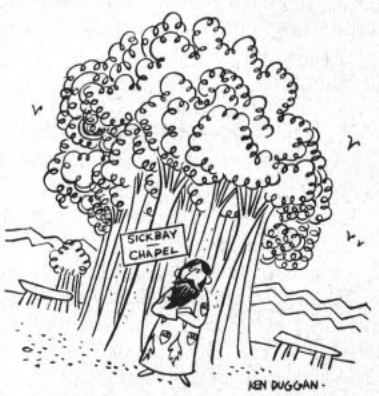
HOW DID IT START

Oak Leaf Insignia

The traditional connection between the oak leaf and medicine dates back to the time of the physician-priests of the ancient Britons, the Druids. They performed both professions, uniting the two into one, and the oak groves were their temples.

The oak was a sacred tree to them, and on their white robes were embroidered wreaths of oak leaves and acorns in gold, silver or colored threads. Ever since that time the oak leaf has shared with the caduceus (staff) the position as symbol of the medical profession.

Although the caduceus and oak leaf have quite often been identified with the Medical Corps, at one time the medical profession also used a spray of olive leaves as a designation. But in the 1880s, the gold oak leaf with the silver acorn superimposed upon it became the official insignia of the Medical Corps and, with certain slight variations, remains its insignia today.



Duty, etc.) he must request removal from the Bureau's list. Placement on more than one list can result in duplicate orders and possible penalty.

Recruiting and Instructor Duty Lists

Although the normal method for obtaining shore duty is via the SDEL there are other types of shore duty which, if requested, may speed up your assignment. One of these is *Recruiting Duty.* While this type of duty is more difficult to obtain than Bureau and Fleet Shore Duty because of certain restrictions, a longer wait on the eligibility list is frequently more than compensated for by the location of the duty assignment when finally received. This is often the only method of obtaining duty in many inland localities where the only military activities are the recruiting stations.

A service record free of disciplinary offenses is one of the first prerequisites to being eligible for Recruiting Duty. Further, billets in Recruiting Duty are not set up for all ratings. This is especially applicable in the lower rates. A list of rates which are required in the recruiting program is published periodically in BuPers Instructions. Requests for Recruiting Duty are submitted in a *letter form* to BuPers. The sea duty eligibility requirements and length of tours are the same as for BuPers Shore Duty.

Instructors in naval schools and in recruit training commands are ordered from *still another list* maintained in the Bureau. There are a great number of such billets throughout the United States. The fact that this type of duty is not considered, by some men, to be quite so desirable as the types of duty discussed above, serves to keep the *Instructor Duty List* smaller than the other lists.

Also, a man on the Instructor Duty List has a decided advantage in that *it is the only list upon which a man may remain while simultaneously enjoying a position on the SDEL.* Hence, if a man wants to go ashore as soon as possible, and assuming that he is eligible, he would be wise to request shore duty as an instructor.

An additional advantage to instructor duty is that the tour is for three years, which is at least a year longer than the prescribed tours of shore duty for the majority of rates. Continuous sea duty requirements are the same as for Recruiting Duty and Bureau Shore Duty. Other eligibility requirements, which are subject to occasional change, are periodically announced in BuPers Instructions.

"When I said you'll be boxing today, I meant these oranges, not in a ring, featherhead!"

Fleet Shore Duty

Fleet shore duty assignments are made from lists maintained by the various Force and Type Commanders for shore duty under their respective administrative commands.

Fleet administered shore duty billets are located predominantly on the East and West Coasts. In many cases personnel who desire shore duty in the coastal areas will find that their chances of early shore duty would be greatly enhanced by requesting this type of duty rather than BuPers shore duty. Requests for Fleet Shore Duty are submitted to the Force or Type Commander concerned in accordance with directives promulgated by those Commanders.

Personnel may not be on both the *Fleet Shore Duty Eligibility List* and the *BuPers Shore Duty Eligibility List* at the same time. An eligibility penalty may be assigned for personnel who violate this provision.

Answers to Your Questions

Does the date of submission of my shore duty request determine my position on the SDEL?

No. Your position on the SDEL is determined only by the date your current tour of sea duty commenced. Those with the longest time at sea are at the top of the list—those with the shortest time at the bottom.

Do I compete for shore duty with all other men on the list?

No. Only with those personnel of the same rate. For example all SKCs are in one group and all SK1s are in another group.

Must I indicate more than one locality preference for shore duty?

No. NavPers Form 2416 (Shore Duty Request) provides space for two choices plus an alternate choice for duty anywhere in the U.S. Any or all choices may be made.

Is there any advantage to making more than one choice of locality?

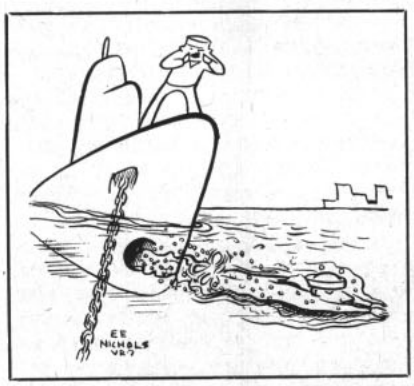
Yes. Where only one district is requested, you, in effect, are telling the Bureau that you are willing to stay at sea until your name reaches the top of the list for that particular district. In the meantime many personnel of your rate who have made two choices or who have requested duty anywhere in the U.S. may have been ordered ashore even though they may have been at sea for a much shorter period than you. They, of course, would not be ordered to the district which you have chosen.

Does the Bureau order a man to a specific locality or city?

No. The Bureau orders you to the district which you have chosen, informing the District Commandant of the specific locality in which you would like to serve. The Commandant then assigns you in accordance with your wishes if the needs of the service permit. Otherwise you are ordered to a locality within the district where your services are required. In making such an assignment the Commandant attempts to place you as close as possible to the locality which you have requested.

May I decline shore duty orders once they have been received?

Only in case you have insufficient obligated service and refuse to agree to extend your enlistment. In such cases you will be required to serve an additional two years at sea prior



"All right, all right, you can strike for torpedoman's mate."

—E. E. NICHOLS, ADAA, USN.

to becoming eligible again for shore duty. However, you do not lose credit for sea duty already performed.

Is the information which I place on my shore duty request verified in the Bureau?

Yes. Every request received in BuPers is thoroughly checked against information contained in your duplicate service record. Special care is exercised to see that the date from which your continuous sea duty is computed is correct.

May I submit requests for more than one type of shore duty?

Only in certain cases. You may be on the list for Instructor Duty and BuPers shore duty simultaneously. However you cannot be on any other two lists at the same time. For example, if you are on the Recruiting Duty List you cannot be on the BuPers Shore Duty List or a shore duty list administered by one of the Fleet Commanders. If you are on one of the lists administered by the Fleet Commanders you cannot be on *any* of the Bureau lists.

May I make changes to my shore duty request after it has been submitted?

Yes, anytime prior to issue of shore duty orders. Changes should be made by submission of a new card (NavPers 2416) marked "CORRECTED COPY." Changes submitted in correspondence form are not desired. Changes received in the Bureau after orders have been written will not be honored.

Should I notify the Bureau when my enlistment expires?

Yes. Otherwise your request will be placed on the inactive list and orders will not be written.

When does my continuous sea duty commence?

In general on the date you are transferred to sea duty.

I am ordered from shore duty to duty in connection with commissioning or recommissioning of a ship and on board for duty when commissioned. When does my sea duty commence?

If the ship is commissioned within three months of the date you were transferred, your sea duty commences on the date of your transfer. If more than three months, your sea duty commences on the commissioning date.

I have never had shore duty but went directly from recruit training to sea. Did my sea duty commence on the date I enlisted?

No. It commenced on the date you were transferred to sea.

I served at sea for five consecutive years. I was then hospitalized for three months and then placed on limited duty ashore for eight months following which I returned to sea duty. Does the hospitalization and the limited duty break my continuous sea service?

No, since it was a total of less than twelve months. Had the period ashore exceeded twelve months it would have counted as a normal tour ashore and, upon transfer to sea, you would again have to start accumulating your continuous sea service.

Can I tell, from my position on the SDEL, when I might expect shore duty orders?

No. The SDEL is subject to frequent change. You might be #2 on the list today but in the event another man is placed on the list and

Some Districts Have No Quotas for Certain Rates

If your rate is listed after any of the naval districts or activities printed below, DO NOT request duty at that activity (unless there is an asterisk after your rate). While there is no district allowance for ANY of the below listed rates, an asterisk (*) indicates that there is a special allowance, within the geographic limits of the district indicated, administered by the Chief of Naval Personnel. These billets marked with an asterisk are filled by the Chief of Naval Personnel by direct detailing, and personnel of these rates may request assignment in the district concerned.

- *1st Naval District*—SOC, FT2, FT3, IM2, IM3, OM1*, OM2, OM3, PIC*, PI2, PI3, all LI, DMC, DM3, ICC, IC3, all PM, ML3, SV1, CE2*.
- *3rd Naval District*—SO3, TM3, FT2, FT3, all IM, OMC, OM3, all PI, all LI, DM3, MR1, MR3, IC1, IC3, all PM, all ML, all SV, all CE, CDC, CD1, CD3, all CM, all BU, all SW, all UT, AL2, AL3, all AO, all AC, AB1, AB3, AEC, AE1, AE3, AM3, all PR.
- *4th Naval District*—TM3, FT3, MNC, MN2, all IM, all OM, JO2, PIC*, PI1, PI2, PI3, LIC* LI1, LI2*, LI3*, MR1, MR2, MR3, FP3, all PM, all ML, all SV, all CE, CMC, CM2, CM3, all BU, all SW, all UT.
- *5th Naval District*—All OM, all PI, LI1, PMC, PM1, PM3, all ML, SV3, CE3.
- *6th Naval District*—SOC, SO2, FT1*, IM3, OMC, OM2, all PI, DM1, DM3, IC1*, IC2*, IC3*, all PM, all ML, SVC, SV3, CEC, CE2*, BU2, SWC, SW2.
- *8th Naval District*—RD3, SO1, SO3, TM3, all MN, IMC, IM1*, IM2, IM3, all OM, JO2, JO3, all PI, all LI, DM1* MR1*, MR3, ME3*, FP3, DC3*, all PM, all ML, all SV, all CE, CDC, CD1, CD2*, CD3*, all CM, all BU, all SW, all UT, AD2*, AD3*, ATC*, all AL*, AO1*, AO3*, all AC, all AB, all AE*, AM3*, PRC, PR1*, PR2*, PR3, AKC*, AK2*, AK3*, PH3*.
- *9th Naval District*—MN1, MN2, MN3, IM2, IM3, PIC*, PI1, PI2, PI3, LIC*, LI1, LI2, LI3, DMC*, EN3, PMC* PM1, PM2, PM3, MLC*, ML1, ML2, ML3, SVC*, SV1, SV2, SV3, CE1, CE2, CE3, CM1, CM2, CM3, UT1, UT2, UT3, AD2, AD3, ATC*, AT1, AT2, AT3, ALC*, AL1, AL2, AL3, AOC*, AO1, AO2, AO3, ACC*, AC1, AC2, AC3, ABC*, AB1, AB2, AB3, AEC*, AE1, AE2, AE3, AMC*, AM1, AM2, AM3, PRC*, PR1, PR2, PR3, AKC*, AK1, AK2, AK3.
- *11th Naval District*—MNC, MN2, OM1, OM3, all PI, LI1, LI2, LI3.
- *12th Naval District*—IM1, OMC, OM1, OM3, all PI, LI1, PMC, PM1, PM3, all SV, CE1, SW3.
- *13th Naval District*—SOC, SO1, SO3, FT1*, FT2, FT3, all IM, OM1, OM2, OM3, JO2, all PI, LIC, LI1, LI3, DM1, DM2, DM3, MRC, MR1, MR3, FPC, FP3, all PM, all ML, SVC, SV1, SV2, CEC, CE1, CMC, CM1, BUC, SWC, SW1, SW2, UTC, UT1, UT2, ALC, ABC, AB2, AB3, AEC, AE2, AMC, PR1, PR2, PH3.
- *Severn River Naval Command*—RDC, RD3, SOC, SO3, all TM, all MN, all IM, all OM, TE2, RMC, RM1, RM3, JOC, JO1, all PI, all LI, DMC, DM2, DM3, MM3, MRC, MR2, MR3, BT2, BT3, ICC, IC3, ME2, ME3, FPC, all PM, all ML, all SV, all CE, all CD, all BU, all SW, all UT, AO1, AO2, ACC, AB1, PRC.
- *Potomac River Naval Command*—RD1, SOC*, SO3, OM2, OM3, JOC*, JO2*, all PI, DMC*, IC3, PMC, PM2, PM3, all ML, SV1, SV2, SV3, all CE, CM2, BU1*, BU2, BU3, all SW, UTC, UT1*, UT2, UT3.
- *Chief of Naval Air Training*—all SO, all FT, all MN, IMC, all OM, all PI, LIC, LI1, LI3, MRC, MR1, MEC, FPC, FP2, all PM, all ML, SVC.
- *Chief of Naval Airship Training and Experimentation*—QMC, QM3, all RD, SOC, all TM, all GM, all FT, all MN, IM1, IM2, IM3, all OM, PNC, SHC, JOC, JO1, JO2, all PI, all LI, all DM, MM1, MM2, MM3, ENC, EN3, MR1, MR2, MR3, BTC, BT2, BT3, all EM, all IC, all ME3, all FP, all DC, all PM, all ML, all SV, all CE, all CD, all CM, all BU, all SW, all UT, PR2.

he has accumulated more sea service he would precede you and would automatically drop you to #3. The Bureau has no way of predicting, with any degree of accuracy, the date that any one man may get orders to shore duty.

Is there anything I can do to increase my chances of getting shore duty?

In many cases, yes. If you have requested only one district, it would be wise to make a second choice and also request duty anywhere in the U. S. Also, there are certain districts which are not so frequently requested as other districts which results in a shorter list for the former. In this connection particular attention is invited to the accompanying chart showing the status of the Shore Duty Eligibility List.

I am eligible for transfer to the Fleet Reserve. May I request assignment to shore duty in the district in which I expect to be released from active duty?

Only if you are in all respects eligible for a normal tour of shore duty. The fact that you anticipate transfer to the Fleet Reserve has no bearing on assignment to shore duty. The Chief of Naval Personnel realizes the advantages accruing to a man serving ashore in the locality of his choice for the last assignment of his active service. However the acute need for trained petty officers and the large numbers of personnel transferring to the Fleet Reserve make impracticable the favorable consideration of requests for transfer solely for reasons associated with transfer to the Fleet Reserve and return to civilian life.

I was assigned to shore duty in the Fourth Naval District. On my request for shore duty I requested duty in either the Sixth Naval District, the Ninth Naval District, or anywhere in the U.S. Would a request for reassignment to duty in the Sixth Naval District receive favorable consideration?

No. You were assigned to the Fourth Naval District as a direct result of requesting duty anywhere in the U. S. Accordingly, the Chief of Naval Personnel considers you as having been assigned to one of the duties of your choice. No transfers are effected from one Naval District to another except in humanitarian cases in which case the requirements of BuPers Inst. 1306.24 must be met.

I was assigned to a course of instruction in a service school which lasted for eight months. Just after graduating and prior to returning to sea duty I was hospitalized for three months. Upon completion of hospitalization I was sent to RECSTA Norfolk for general detail and further assignment by the Chief of Naval Personnel. By the time I was transferred to sea I had been ashore for a total of thirteen months. I understand that since I have been ashore in excess of twelve months I am considered to have completed a normal tour of shore duty. Is there any way that the thirteen months' period ashore can be waived?

Yes, in some cases. In accordance with para 8.c. BuPers Inst. 1306.20A you may submit a request to the Chief of Naval Personnel for a waiver of the time in question. Decision on such a request would be based on many factors such as whether your family was near you during the period ashore, the number of years sea duty you accumulated prior to going to school, the number of personnel of your rate on the Shore Duty Eligibility List who had not had even the short time ashore that you had served, and whether you were able to go on leave or liberty while hospitalized. In short the determining factor would be the degree to which you had enjoyed the benefits normally associated with a tour of shore duty.

Now – check the BuPers Shore Duty Eligibility List on the following pages to find out approximately where you stand according to your rate and the localities that you are interested in. *Note that this list is for Bureau Shore Duty.* It will tell you nothing about Fleet Shore Duty. You should also check the list of rates for which there is no allowance in certain naval districts (page 44).

WAY BACK WHEN

Navyman Aided Research in Physics

The research performed by a Navyman who became a scientist and Nobel Prize winner had a great deal to do with the development of the theory of relativity.

Navy scientist Albert A. Michelson provided the important element in an equation —the velocity of light—that aided Professor Einstein to arrive at the momentous conclusion that mass and energy are equivalent.

One of the Naval Academy's most distinguished graduates, Michelson devoted almost all of his professional life to research in connection with light. He carried out his first experiments for measuring light's velocity at the Academy, where he graduated with the Class of 1873. He served at USNA as an instructor of physics and chemistry from 1875 through 1879. Continuing in the academic field, he was not to resume his association with the Navy until World War I. During the war he rejoined the Navy to work on new devices for naval use.

It was in 1879 that Michelson made his highly successful attempt at measuring the velocity of light. This experiment was made possible through the cooperation of the Navy Department, which not only made physical facilities available to him, but took the unprecedented step of granting him two appropriations, one of which was for $2000. (These were among the first sums granted by the Navy for the support of basic research).

For this experiment, Michelson established a base at the Washington Monument and another in Arlington, Va., some three miles distant. The length of time necessary for light to pass from one base to another was measured so precisely that the speed of light was determined with greater accuracy than had ever before been possible.

While scientist Michelson did not make the military his career, his later work for the Navy during World War I was also valuable. At that time he invented a range finder that was adopted by the Navy as an item of equipment for combat ships.

The first American scientist to win the Nobel Prize in Physics (1907), Michelson died in 1931.

BuPers Shore Duty Eligibility List Shows

(Status as of

The table below is a revised and improved method of indicating to Navymen afloat and overseas their standing on the BuPers Shore Duty Eligibility List. It is designed to give you as much information as possible concerning your rating and the locations you have selected as your choices for shore duty.

From this chart you can generally compute your approximate position on the SDEL. Here's how to do it: Check down the list until you come to your rate and then start reading across the column until you come to the location or locations that you have selected on your SDEL request form. Under each naval district or other command listed, you will see two different dates, such as 12-48/10-49. The first date in this case (December 1948) is the date the top man on the SDEL in your rate began his sea duty tour. The second date in the example (October 1949) is the date the fourth man from the top of the list in your rate began his sea duty. Where only one date appears it means that there are less than four men of that rate on the SDEL for that locality. If no date appears, no man of that rate has requested the district or area indicated, OR there is no allowance for the rate. Whether or not there is an allowance for your rate in the district of your choice may be determined by looking over the information contained in the box on page 00.

This table is helpful in various ways. It is possible to make a fair guess as to the district or districts to which you would have the best chance of being ordered. For example, you are a BMC with sea duty commencing as of July 1947, and you have requested duty in ComONE. By looking at the place indicated on the table (first column, first line) you can see that you are among the first four men on the SDEL for ComOne. Or, supposing you are a BM2 who has not yet requested shore duty.

	RATE	COM-1	COM-3	COM-4	COM-5	COM-6	COM-8	COM-9
Boatswain's Mate	BMC	8-45/1-48	6-42/9-48	8-45/10-49	9-48/8-49	9-40/9-48	9-48/12-49	2-47/6-49
	BM1	8-48/2-49	6-44/2-48	11-47/4-48	8-48/1-49	9-42/6-48	3-44/11-46	1-42/2-48
	BM2	1-46/12-47	12-45/7-47	3-47/12-47	1-48/4-48	10-47/1-48	4-41/10-47	12-45/1-48
	BM3	1-46/7-47	12-46/7-47	8-41/5-47	1-42/1-48	12-45/3-48	8-46/1-48	12-45/12-47
	BMSN/SA	1-49/— —	3-48/— —	2-50/— —	7-49/— —	8-49/— —	6-44/6-50	2-48/7-48
Quartermaster	QMC	7-47/4-49	12-44/4-49	4-47/12-48	2-49/7-49	2-49/1-50	11-39/1-49	9-46/1-49
	QM1	8-44/4-45	6-43/8-45	3-44/6-46	3-44/3-46	10-45/3-47	10-45/6-46	8-45/3-46
	QM2	8-47/1-48	11-45/7-47	10-46/8-47	3-43/3-48	3-43/10-47	10-47/1-48	1-46/10-47
	QM3	3-49/10-49	11-43/6-48	11-43/9-48	9-49/— —	11-46/8-49	5-48/7-50	4-48/2-49
	QMSN/SA	— — — —	— — — —	— — — —	— — — —	— — — —	10-47/— —	10-47/— —
Radarman	RDC	7-48/11-51	7-47/11-51	8-44/7-52	8-44/7-52	7-47/— —	5-46/— —	7-50/— —
	RD1	7-46/12-46	3-46/3-47	5-46/11-47	3-46/1-48	2-46/12-46	12-47/2-48	1-46/1-47
	RD2	3-48/7-48	4-48/9-48	4-48/6-48	7-48/10-50	4-48/11-48	6-47/8-48	3-48/7-48
	RD3	— — — —	2-48/3-51	12-48/— —	— — — —	3-52/— —	— — — —	— — — —
	RDSN/SA	— — — —	— — — —	— — — —	— — — —	1-52/— —	7-51/— —	— — — —
Sonarman	SOC	— — — —	1-49/— —	3-41/— —	2-52/— —	— — — —	5-44/11-51	9-51/— —
	SO1	1-49/8-50	11-42/6-49	11-42/2-48	12-46/11-50	12-46/2-49	— — — —	4-48/5-49
	SO2	6-47/7-49	2-47/3-49	3-49/3-51	6-50/5-51	— — — —	3-49/4-51	3-48/6-50
	SO3	6-48/3-49	— — — —	2-49/5-51	— — — —	1-49/6-50	— — — —	7-49/5-51
	SOSN/SA	— — — —	— — — —	— — — —	— — — —	3-51/— —	— — — —	6-50/— —
Torpedoman's Mate	TMC	4-35/7-49	6-40/8-49	3-40/4-48	7-49/— —	3-48/7-49	1-51/— —	7-46/— —
	TM1	3-43/3-48	6-46/1-48	10-46/— —	8-48/7-49	8-48/11-49	12-43/— —	10-44/6-48
	TM2	6-48/4-50	5-48/4-50	12-40/8-47	10-50/— —	12-40/2-49	11-45/2-49	10-47/7-48
	TM3	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	12-48/— —
	TMSN/SA	— — — —	— — — —	— — — —	1-48/— —	— — — —	— — — —	— — — —
Gunner's Mate	GMC	2-50/— —	2-50/— —	12-49/— —	9-36/— —	2-50/— —	11-47/2-50	2-50/— —
	GM1	12-41/4-42	9-43/4-44	5-42/9-43	10-43/3-45	6-43/8-43	7-43/9-44	10-43/8-44
	GM2	6-46/10-47	8-45/5-47	5-44/4-47	8-47/1-48	9-46/8-47	4-46/6-47	10-40/8-46
	GM3	10-47/12-47	8-46/1-48	2-46/3-48	3-48/1-49	12-47/5-48	12-47/3-48	10-47/4-48
	GMSN/SA	10-46/— —	10-50/— —	— — — —	— — — —	6-48/— —	2-48/3-49	11-50/— —
Fire Controlman	FCC	9-50/— —	— — — —	12-49/— —	11-40/— —	— — — —	11-49/— —	7-52/— —
	FC1	11-42/— —	10-46/— —	8-46/— —	1-47/— —	10-40/12-47	2-48/— —	10-40/7-50
	FC2	9-48/— —	3-46/— —	3-46/9-48	— — — —	12-47/— —	3-48/— —	6-45/12-47
	FC3	11-47/4-49	1-48/— —	1-48/4-49	11-47/— —	1-47/7-50	2-48/11-48	10-47/8-48
	FCSN/SA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Fire Control Technician	FTC	2-50/— —	5-47/12-51	5-47/12-51	10-46/— —	10-46/— —	6-51/— —	6-49/— —
	FT1	9-47/8-48	9-47/4-49	9-47/7-48	12-47/10-49	6-43/10-49	7-46/8-48	6-46/8-48
	FT2	1-48/8-48	— — — —	4-45/6-48	3-48/— —	4-45/2-49	8-47/10-48	4-43/4-48
	FT3	— — — —	— — — —	— — — —	— — — —	4-48/— —	6-49/— —	2-48/— —
	FTSN/SA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Mineman	MNC	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	MN1	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	MN2	8-48/— —	8-48/— —	— — — —	— — — —	— — — —	— — — —	— — — —
	MN3	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	MNSN/SA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —

Status by Your Rate and Area Requested

1 May 1954)

You have had sea duty which began in January 1948. By looking at the chart you can decide which district would be your "best bet." You would be high on the list if you requested the 5th ND, 6th ND, 9th ND, 13th ND, PRNC or SRNC. For the other districts your standing would be somewhere below the first four BM2s.

BEFORE YOU START CHECKING THIS LIST, note that all districts do NOT have allowances for all rates. Therefore you should know which districts these are, and when you submit your shore duty request or a change to your request you should be sure that the district you desire has an allowance for your rate. The information on districts which do not have allowances for certain rates or ratings are listed in the box on page 44.

In all cases when submitting your shore duty request it is advisable for you to take into consideration the column indicating duty "Anywhere U. S." Personnel who request "Anywhere U. S." are given consideration for assignment to any district for which they would have more sea duty than the top man on the list who has requested that district specifically.

It must also be remembered that the SDEL is subject to frequent change as new requests are received. While you might be #3 man this month you could drop to #6 or #7 by next month if other men of your rate submit requests for the district you have chosen and these men have more sea duty than you.

REMEMBER, this table shows standings on the BuPers *Shore Duty Eligibility List. It contains no information for men who have put in requests for the FLEET Shore Duty Eligibility Lists (see story for details).*

Certain ratings (MU, MA, CT, TD and AG) are not included on the BuPers Shore Duty Eligibility List because they are subject to special detailing.

COM-11	COM-12	COM-13	PRNC	SRNC	CNATRA	CNATE	ANYWHERE U. S.	RATE
10-46/7-49	2-48/2-50	10-46/1-49	6-48/8-50	8-50/— —	5-42/4-49	12-48/— —	2-48/4-49	BMC
5-47/1-49	12-47/3-49	1-49/8-49	9-48/5-49	7-48/7-49	9-43/7-48	8-49/— —	9-42/5-47	BM1
2-45/4-48	4-41/5-48	3-48/7-48	4-48/7-48	3-48/9-48	12-46/10-47	9-47/— —	12-46/11-47	BM2
11-47/9-48	10-47/10-48	10-47/10-48	3-48/8-48	5-48/9-49	10-47/8-48	8-41/5-49	9-45/2-47	BM3
— — — —	— — — —	— — — —	— — — —	— — — —	7-48/11-50	— — — —	6-44/7-49	BMSN/SA
7-42/9-45	9-48/5-49	7-42/12-48	4-42/6-49	5-49/— —	4-49/— —	— — — —	4-42/12-48	QMC
9-42/11-43	1-41/6-46	3-47/10-47	11-44/3-47	3-48/— —	6-45/12-46	5-47/— —	9-40/12-47	QM1
7-47/12-47	7-47/1-48	10-47/2-48	11-45/3-49	1-48/1-51	7-48/1-48	1-51/— —	3-43/7-47	QM2
7-48/6-50	4-48/1-50	7-48/4-50	9-46/1-51	1-51/— —	7-48/2-49	— — — —	7-48/8-49	QM3
2-48/— —	2-51/— —	— — — —	1-49/— —	— — — —	— — — —	— — — —	2-51/— —	QMSN/SA
11-46/2-49	5-46/9-50	3-49/— —	— — — —	— — — —	7-52/— —	— — — —	8-48/7-50	RDC
5-46/6-47	5-46/3-47	10-47/8-48	— — — —	7-48/— —	3-46/9-47	— — — —	1-46/7-46	RD1
3-48/7-48	7-48/7-48	7-48/2-49	12-48/10-49	12-48/— —	2-48/11-49	— — — —	3-48/4-48	RD2
7-50/— —	— — — —	3-50/— —	8-51/— —	— — — —	11-50/— —	— — — —	11-50/— —	RD3
— — — —	— — — —	— — — —	— — — —	— — — —	7-51/— —	— — — —	— — — —	RDSN/SA
11-40/10-49	1-52/— —	— — — —	— — — —	— — — —	— — — —	— — — —	3-41/8-50	SOC
4-42/3-48	10-40/4-49	— — — —	— — — —	— — — —	— — — —	5-51/— —	7-46/11-48	SO1
8-48/9-48	3-48/1-49	4-48/2-51	3-47/— —	3-47/— —	— — — —	1-51/— —	12-47/1-49	SO2
3-51/ — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	7-49/4-51	SO3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	6-50/— —	SOSN/SA
3-38/7-48	2-36/1-50	12-30/7-48	— — — —	— — — —	— — — —	— — — —	2-49/1-50	TMC
6-44/5-48	8-40/3-49	4-47/— —	1-48/— —	— — — —	5-47/12-48	— — — —	2-48/12-48	TM1
6-48/— —	— — — —	6-48/— —	12-48/— —	— — — —	1-48/9-50	— — — —	3-49/10-50	TM2
— — — —	— — — —	— — — —	2-51/— —	— — — —	— — — —	— — — —	— — — —	TM3
— — — —	— — — —	— — — —	4-50/— —	— — — —	— — — —	— — — —	— — — —	TMSN/SA
9-48/1-49	6-48/12-48	11-44/1-49	— — — —	— — — —	— — — —	— — — —	1-49/1-50	GMC
4-43/4-44	10-43/6-45	3-43/9-44	5-42/3-41	5-44/2-48	12-43/9-44	— — — —	4-43/10-43	GM1
6-46/8-47	11-47/12-47	6-44/11-47	11-46/12-47	3-49/1-51	9-46/8-47	— — — —	6-46/4-47	GM2
12-47/7-48	10-46/7-48	2-47/7-48	2-46/8-48	7-48/— —	5-46/4-48	— — — —	10-46/3-48	GM3
— — — —	1-51/— —	9-50/— —	— — — —	— — — —	2-48/— —	— — — —	6-48/1-51	GMSN/SA
5-48/10-48	9-48/— —	9-50/— —	4-48/— —	— — — —	— — — —	— — — —	9-48/9-50	FCC
11-47/1-51	11-47/5-50	11-51/— —	— — — —	— — — —	— — — —	— — — —	8-46/12-47	FC1
7-47/3-49	— — — —	1-48/— —	12-47/— —	— — — —	6-45/— —	— — — —	3-46/12-47	FC2
5-47/5-48	12-47/— —	1-47/— —	— — — —	— — — —	12-47/6-48	— — — —	5-47/1-48	FC3
— — — —	— — — —	3-48/— —	— — — —	— — — —	— — — —	— — — —	— — — —	FCSN/SA
10-34/6-51	6-49/8-51	— — — —	— — — —	— — — —	— — — —	— — — —	5-48/6-51	FTC
5-48/5-50	5-48/— —	7-49/— —	3-48/5-50	5-49/— —	— — — —	— — — —	7-46/6-48	FT1
10-46/7-48	10-46/7-48	— — — —	4-43/3-49	— — — —	— — — —	— — — —	10-46/1-48	FT2
9-48/3-50	9-48/3-50	— — — —	10-49/— —	— — — —	— — — —	— — — —	8-48/5-48	FT3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	FTSN/SA
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	MNC
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	MN1
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	MN2
8-50/— —	8-50/— —	— — — —	— — — —	— — — —	— — — —	— — — —	8-50/— —	MN3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	MNSN/SA

BuPers Shore Duty Eligibility List (cont.)

	RATE	COM-1	COM-3	COM-4	COM-5	COM-6	COM-8	COM-9
Electronics Technician 	ETC	4-50/— —	8-47/10-50	8-47/— —	9-48/9-52	3-51/— —	5-48/9-52	3-51/— —
	ET1	1-47/12-48	5-48/7-49	5-48/3-50	6-48/12-49	9-40/7-48	1-48/6-48	2-48/1-50
	ET2	7-48/— —	7-48/— —	10-51/— —	7-47/— —	11-50/— —	7-47/— —	11-50/— —
	ET3	— — — —	— — — —	8-50/— —	— — — —	— — — —	10-49/— —	12-48/2-52
	ETSN/SA	2-51/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Instrumentman 	IMC	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	IM1	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	IM2	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	IM3	— — — —	— — — —	— — — —	— — — —	10-50/— —	— — — —	— — — —
	IMSN/SA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Opticalman 	OMC	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	6-41/— —
	OM1	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	OM2	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	OM3	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	OMSN/SA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Teleman 	TEC	3-52/— —	6-52/8-52	6-52/7-52	— — — —	4-52/— —	6-50/— —	— — — —
	TE1	4-48/10-51	10-47/11-51	10-48/2-52	3-49/11-51	3-49/2-52	10-47/4-52	4-48/5-48
	TE2	3-48/— —	9-49/— —	1-48/— —	10-51/— —	12-51/— —	6-48/— —	9-49/— —
	TE3	— — — —	3-46/2-52	3-46/— —	— — — —	— — — —	10-49/— —	— — — —
	TESN/SA	— — — —	— — — —	10-51/— —	— — — —	6-49/10-51	7-48/— —	— — — —
Radioman 	RMC	4-40/6-49	4-40/1-48	6-49/4-51	7-48/2-50	7-48/10-48	6-39/7-48	11-48/2-50
	RM1	6-42/1-46	6-44/6-46	6-44/4-48	8-45/7-48	3-46/4-48	10-39/1-48	8-44/7-46
	RM2	4-48/11-48	2-47/7-48	2-47/2-49	4-48/11-49	4-48/12-48	12-47/6-48	12-47/5-48
	RM3	— — — —	7-51/— —	— — — —	— — — —	5-51/— —	— — — —	2-47/— —
	RMSN/SA	— — — —	12-49/— —	12-49/— —	— — — —	— — — —	12-51/— —	3-52/— —
Yeoman 	YNC	2-51/8-52	12-40/2-52	3-52/— —	— — — —	2-51/10-52	4-51/10-52	3-52/— —
	YN1	12-51/10-52	10-51/4-52	6-49/12-50	4-52/— —	9-50/12-50	1-49/8-51	11-50/12-51
	YN2	12-50/— —	8-50/— —	6-51/— —	8-48/— —	4-49/— —	8-47/6-50	8-48/5-51
	YN3	— — — —	1-52/— —	— — — —	— — — —	11-48/5-52	4-49/5-52	3-51/— —
	YNSN/SA	— — — —	1-51/— —	— — — —	— — — —	— — — —	— — — —	8-51/— —
Personnel Man 	PNC	— — — —	— — — —	— — — —	— — — —	8-49/— —	8-51/— —	8-51/— —
	PN1	8-52/— —	8-50/— —	8-50/9-51	— — — —	8-52/11-52	3-49/11-52	9-51/8-52
	PN2	— — — —	— — — —	10-51/— —	— — — —	12-48/— —	12-48/— —	9-50/— —
	PN3	— — — —	— — — —	10-51/— —	1-52/— —	1-51/— —	4-51/— —	1-52— —
	PNSN/SA	4-51/— —	4-51/— —	3-51/— —	— — — —	— — — —	— — — —	— — — —
Storekeeper 	SKC	12-48/9-51	4-50/5-51	4-50/6-51	8-51/9-51	3-51/7-51	11-49/4-51	6-50/5-51
	SK1	4-50/1-51	5-44/9-49	5-44/4-50	6-50/3-51	11-46/4-50	8-48/7-50	3-48/10-50
	SK2	8-51/— —	5-51/— —	4-44/1-52	11-51/— —	7-51/— —	10-50/1-52	1-49/11-51
	SK3	— — — —	8-50/3-52	8-50/1-52	1-52/— —	— — — —	11-50/6-51	10-51/1-52
	SKSN/SA	— — — —	— — — —	3-48/— —	— — — —	— — — —	1-52/— —	— — — —
Disbursing Clerk 	DKC	1-52/— —	6-52/— —	— — — —	12-51/— —	6-52/— —	3-52/— —	— — — —
	DK1	7-51/2-52	8-50/3-52	1-52/3-52	9-48/8-52	1-52/8-52	10-49/8-52	8-50/2-52
	DK2	— — — —	2-52/— —	2-52/— —	— — — —	— — — —	4-51/— —	10-48/— —
	DK3	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	DKSN/SA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Commissaryman 	CSC	5-50/5-51	4-49/1-51	8-50/5-51	8-48/9-50	2-48/1-50	2-48/1-50	8-48/3-50
	CS1 (Cook)	12-47/9-50	9-45/10-47	9-45/11-49	10-50/1-51	7-50/1-51	12-49/5-50	8-44/4-51
	CS1 (Butcher)	— — — —	6-50/— —	10-51/— —	— — — —	— — — —	6-50/— —	9-50/— —
	CS1 (Baker)	7-49/9-50	9-49/2-50	4-50/6-51	2-51/10-51	4-44/3-51	6-48/9-51	12-46/7-49
	CS1 (NJC3001)	2-50/— —	— — — —	4-50/— —	— — — —	— — — —	— — — —	10-49/— —
	CS2 (Cook)	6-45/3-50	6-46/2-49	10-46/1-49	8-51/10-51	6-44/8-50	12-44/2-48	7-46/2-48
	CS2 (Butcher)	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	CS2 (Baker)	5-48/9-49	6-49/5-50	6-49/7-50	6-49/9-51	8-50/4-51	1-48/9-51	2-46/7-49
	CS3 (Cook)	5-51/4-52	3-46/7-48	12-47/9-48	1-51/11-51	6-49/12-50	4-48/10-50	12-49/3-51
	CS3 (Butcher)	— — — —	— — — —	— — — —	— — — —	— — — —	2-48/— —	— — — —
	CS3 (Baker)	2-48/12-50	3-50/12-50	8-50/1-51	12-51/— —	12-47/5-51	5-49/3-51	1-51/8-51
	CSSN/SA (Cook)	7-48/5-51	8-49/8-51	4-48/1-52	1-52/— —	5-51/8-51	10-47/3-51	8-49/8-51
	CSSN/SA (But.)	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	CSSN/SA (Baker)	— — — —	10-46/— —	— — — —	— — — —	7-48/12-51	10-51/— —	12-51/— —
Ship's Serviceman 	SHC	12-48/— —	11-50/— —	5-50/— —	4-51/9-51	12-48/4-51	10-51/— —	9-50/— —
	SH1 (Store)	10-47/8-50	7-47/— —	2-48/1-49	8-38/3-49	1-49/2-50	1-49/3-49	1-47/10-49
	SH1 (Cobbler)	— — — —	— — — —	5-48/— —	— — — —	— — — —	— — — —	5-48/— —
	SH1 (Barber)	3-48/11-49	3-48/— —	— — — —	— — — —	— — — —	— — — —	— — — —
	SH1 (Tailor)	— — — —	— — — —	— — — —	— — — —	8-46/9-48	8-46/3-50	3-50/— —
	SH1 (Laundry)	4-46/8-46	6-46/9-46	11-46/9-47	2-46/9-47	10-45/3-47	3-47/10-47	8-46/7-47
	SH2 (Store)	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	SH2 (Cobbler)	— — — —	— — — —	— — — —	— — — —	4-48/— —	1-48/— —	8-48/— —
	SH2 (Barber)	— — — —	— — — —	11-47/— —	2-50/— —	6-48/— —	6-48/— —	— — — —
	SH2 (Tailor)	6-49/— —	7-50/— —	1-50/— —	8-49/— —	3-48/— —	4-48/— —	4-48/— —
	SH2 (Laundry)	10-46/4-47	10-46/9-47	12-46/2-48	12-46/1-48	5-45/1-47	10-46/2-47	1-47/5-47
	SH3 (Store)	4-47/— —	— — — —	4-47/— —	— — — —	— — — —	10-50/— —	— — — —

COM-11	COM-12	COM-13	PRNC	SRNC	CNATRA	CNATE	ANYWHERE U. S.	RATE
10-41/5-48	10-41/6-48	7-48/— —	6-48/— —	— — — —	7-48/— —	— — — —	8-47/3-51	ETC
3-48/6-48	3-48/10-48	5-48/4-50	10-50/2-52	3-51/7-52	7-48/1-51	— — — —	3-48/12-48	ET1
— — — —	— — — —	— — — —	— — — —	— — — —	10-51/— —	— — — —	7-47/11-51	ET2
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	8-50/— —	ET3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	ETSN/SA
8-44/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	IMC
4-49/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	IM1
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	IM2
10-48/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	IM3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	IMSN/SA
— — — —	— — — —	5-49/— —	6-41/— —	— — — —	— — — —	— — — —	— — — —	OMC
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	OM1
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	OM2
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	7-48/— —	OM3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	OMSN/SA
4-42/1-52	5-49/7-52	4-52/— —	9-49/— —	— — — —	11-38/— —	— — — —	8-52/— —	TEC
5-46/— —	4-50/— —	— — — —	9-51/6-52	1-51/— —	10-51/8-52	2-52/— —	10-48/10-51	TE1
4-51/— —	6-48/— —	10-51/— —	— — — —	— — — —	4-51/— —	— — — —	6-51/— —	TE2
7-48/10-51	7-48/10-51	6-50/— —	— — — —	— — — —	11-51/— —	— — — —	3-46/— —	TE3
1-51/— —	1-51/3-52	3-52/— —	7-48/1-52	— — — —	7-49/— —	— — — —	7-48/1-52	TESN/SA
9-41/7-48	10-36/2-48	2-48/4-49	4-48/7-50	— — — —	9-43/2-50	6-49/— —	2-48/6-49	RMC
7-43/7-46	8-46/1-48	2-48/2-49	12-47/8-48	— — — —	5-48/10-48	— — — —	9-44/11-47	RM1
9-47/4-48	4-48/9-48	8-48/9-48	4-48/8-48	12-49/— —	3-48/9-48	7-50/— —	3-48/5-48	RM2
— — — —	— — — —	— — — —	— — — —	— — — —	12-51/— —	— — — —	5-51/— —	RM3
12-48/— —	3-52/— —	— — — —	3-52/— —	— — — —	— — — —	— — — —	12-49/— —	RMSN/SA
9-49/6-52	11-50/— —	9-51/— —	8-51/11-52	12-40/— —	6-51/— —	8-52/— —	12-40/10-52	YNC
8-51/4-52	9-52/— —	8-49/10-50	12-51/8-52	— — — —	8-49/8-51	— — — —	8-49/6-52	YN1
9-41/7-51	12-50/— —	— — — —	8-50/— —	4-51/— —	7-50/— —	— — — —	8-48/— —	YN2
— — — —	5-45/— —	5-45/— —	4-52/— —	— — — —	— — — —	— — — —	1-52/— —	YN3
— — — —	— — — —	— — — —	4-51/— —	— — — —	4-51/5-52	— — — —	5-52/— —	YNSN/SA
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	PNC
10-50/11-52	— — — —	— — — —	10-51/5-52	— — — —	7-51/4-52	7-52/— —	— — — —	PN1
9-50/— —	— — — —	— — — —	— — — —	— — — —	12-50/— —	— — — —	— — — —	PN2
— — — —	— — — —	— — — —	1-51/— —	— — — —	1-52/— —	6-52/— —	— — — —	PN3
— — — —	— — — —	— — — —	— — — —	— — — —	4-52/— —	3-51/— —	— — — —	PNSN/SA
3-47/6-50	11-49/11-50	4-50/8-51	1-51/8-51	1-51/— —	3-50/6-51	— — — —	3-50/5-51	SKC
11-45/7-50	1-48/10-50	7-50/8-50	11-50/9-51	11-50/10-51	11-46/7-50	3-51/— —	1-48/7-50	SK1
7-48/3-51	2-49/— —	— — — —	— — — —	— — — —	3-51/— —	— — — —	1-49/— —	SK2
— — — —	1-52/2-52	— — — —	7-51/— —	— — — —	11-50/12-51	— — — —	12-51/— —	SK3
— — — —	— — — —	1-52/— —	— — — —	— — — —	— — — —	— — — —	1-52/— —	SKSN/SA
12-51/8-52	— — — —	4-52/— —	— — — —	— — — —	— — — —	— — — —	— — — —	DKC
9-50/2-52	12-51/3-52	10-51/4-52	7-51/6-52	2-52/— —	4-51/4-52	— — — —	12-51/2-52	DK1
10-48/— —	9-48/— —	9-48/— —	2-52/— —	2-52/— —	6-51/3-52	— — — —	2-52/— —	DK2
— — — —	— — — —	— — — —	10-51/— —	— — — —	— — — —	— — — —	— — — —	DK3
— — — —	— — — —	5-52/— —	— — — —	— — — —	— — — —	— — — —	— — — —	DKSN/SA
1-49/3-49	10-48/7-50	12-48/7-50	3-51/7-51	6-50/8-51	1-50/7-50	9-51/— —	2-48/5-50	CSC
3-49/1-51	12-41/2-51	5-50/3-51	1-48/7-50	7-50/5-51	12-41/7-49	5-47/12-51	12-41/11-50	CS1 (Cook)
4-52/— —	— — — —	— — — —	2-52/— —	2-52/— —	12-51/— —	10-51/— —	2-52/— —	CS1 (Butcher)
6-50/10-51	7-51/9-51	10-44/5-51	3-51/— —	3-51/— —	6-50/2-51	— — — —	10-50/2-51	CS1 (Baker)
2-52/— —	— — — —	9-51/— —	— — — —	— — — —	9-48/— —	— — — —	— — — —	CS1 (NJC3001)
7-45/11-51	7-45/9-51	1-51/11-51	9-43/10-51	10-51/— —	12-47/1-50	4-46/3-52	7-45/8-51	CS2 (Cook)
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	CS2 (Butcher)
2-51/5-52	5-51/— —	2-51/— —	2-50/— —	— — — —	6-49/4-51	10-50/— —	6-49/5-51	CS2 (Baker)
11-51/— —	3-52/— —	1-52/— —	9-51/— —	— — — —	4-48/12-48	3-52/— —	6-48/7-51	CS3 (Cook)
2-48/— —	— — — —	2-48/— —	— — — —	— — — —	10-50/— —	— — — —	2-48/— —	CS3 (Butcher)
5-51/— —	3-52/— —	— — — —	5-51/— —	— — — —	10-50/5-51	9-50/— —	5-51/1-52	CS3 (Baker)
1-48/— —	8-51/— —	10-50/— —	4-48/— —	— — — —	10-47/1-51	— — — —	10-47/9-51	CSSN/SA (Cook)
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	CSSN/SA (But.)
8-50/— —	— — — —	11-50/— —	— — — —	— — — —	11-50/12-51	— — — —	11-50/— —	CSSN/SA (Baker)
7-47/11-49	6-47/2-50	3-47/1-49	5-50/— —	11-50/4-50	9-47/6-51	— — — —	12-48/10-50	SHC
2-48/3-49	11-47/12-49	2-49/— —	7-48/— —	12-48/— —	6-49/5-50	2-48/— —	8-38/12-48	SH1 (Store)
12-49/— —	12-49/— —	— — — —	— — — —	— — — —	— — — —	— — — —	9-50/— —	SH1 (Cobbler)
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	SH1 (Barber)
12-47/— —	2-47/— —	— — — —	— — — —	— — — —	1-49/— —	— — — —	8-46/1-49	SH1 (Tailor)
8-46/3-47	12-46/4-47	9-46/4-49	4-46/11-48	11-48/— —	12-45/2-47	2-49/— —	2-46/9-46	SH1 (Laundry)
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	SH2 (Store)
1-48/— —	— — — —	8-48/— —	— — — —	— — — —	— — — —	— — — —	— — — —	SH2 (Cobbler)
— — — —	3-48/— —	— — — —	— — — —	— — — —	— — — —	— — — —	6-48/— —	SH2 (Barber)
6-49/— —	4-50/— —	— — — —	8-49/5-50	6-50/— —	— — — —	— — — —	6-49/6-50	SH2 (Tailor)
1-46/11-47	8-47/3-48	8-47/5-48	12-46/4-48	2-48/8-50	7-46/8-47	5-45/— —	10-46/1-47	SH2 (Laundry)
— — — —	— — — —	— — — —	— — — —	9-50/— —	— — — —	— — — —	— — — —	SH3 (Store)

BuPers Shore Duty Eligibility List (cont.)

	RATE	COM-1	COM-3	COM-4	COM-5	COM-6	COM-8	COM-9
Ship's Servicemen (cont.)	SH3 (Cobbler)	— — — —	9-48/— —	— — — —	— — — —	— — — —	— — — —	— — — —
	SH3 (Barber)	— — — —	— — — —	— — — —	— — — —	— — — —	8-50/— —	— — — —
	SH3 (Tailor)	3-49/— —	3-49/— —	— — — —	— — — —	3-48/— —	— — — —	— — — —
	SH3 (Laundry)	12-46/2-48	9-46/2-48	2-46/9-47	9-47/8-48	5-47/4-48	6-48/8-48	2-47/5-48
	SHSN/SA (St.)	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	SHSN/SA (Cob.)	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	SHSN/SA (Bar.)	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	SHSN/SA (Tail.)	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	SHSN/SA (Lau.)	2-48/— —	2-46/12-49	2-46/5-48	— — — —	3-48/7-50	— — — —	1-48/7-50
Journalist	JOC	— — — —	— — — —	3-40/— —	— — — —	— — — —	— — — —	— — — —
	JO1	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	JO2	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	JO3	— — — —	— — — —	— — — —	— — — —	3-52/— —	— — — —	— — — —
	JOSN/SA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Printer	PIC	3-49/— —	— — — —	5-51/— —	1-52/— —	7-51/— —	— — — —	1-50/— —
	PI1	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	PI2	— — — —	— — — —	9-50/— —	— — — —	12-47/2-51	— — — —	— — — —
	PI3	— — — —	— — — —	8-51/— —	8-51/— —	— — — —	— — — —	— — — —
	PISN/SA	— — — —	— — — —	— — — —	— — — —	10-50/— —	— — — —	— — — —
Lithographer	LIC	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	LI1	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	LI2	— — — —	— — — —	6-48/— —	— — — —	— — — —	— — — —	— — — —
	LI3	— — — —	— — — —	12-48/— —	8-51/— —	8-50/— —	— — — —	— — — —
	LISN/SA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Draftsman	DMC	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	DM1	1-51/— —	1-51/— —	— — — —	— — — —	— — — —	— — — —	— — — —
	DM2	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	DM3	— — — —	— — — —	12-51/— —	— — — —	— — — —	— — — —	— — — —
	DMSN/SA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Machinist's Mate	MMC	10-44/12-46	11-42/6-46	11-44/7-46	7-42/10-44	12-39/5-43	12-39/4-41	7-37/10-44
	MM1	12-43/2-45	11-42/10-44	4-43/3-45	10-44/10-45	2-44/1-46	11-43/3-45	11-43/8-44
	MM2	5-44/10-47	7-47/10-47	3-42/2-47	11-46/8-47	2-47/7-47	11-46/8-47	7-46/3-47
	MM3	10-49/— —	3-45/6-48	2-48/3-48	12-49/— —	12-49/— —	5-48/3-49	10-48/10-49
	MMFN/FA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Engineman	ENC	2-50/— —	10-45/— —	— — — —	— — — —	10-45/4-49	5-42/1-50	12-42/1-49
	EN1	12-47/1-48	6-44/12-47	10-47/1-48	7-41/2-48	11-45/7-47	6-46/12-46	11-42/8-43
	EN2	3-47/— —	3-47/7-50	7-42/1-49	3-51/— —	9-47/4-48	4-47/12-48	4-47/4-48
	EN3	— — — —	1-49/— —	1-49/— —	— — — —	— — — —	1-48/10-49	— — — —
	ENFN/FA	— — — —	— — — —	— — — —	8-50/— —	8-50/— —	— — — —	— — — —
Machinery Repairman	MRC	— — — —	7-48/— —	10-48/— —	8-33/— —	5-46/— —	— — — —	— — — —
	MR1	7-43/— —	— — — —	— — — —	— — — —	2-43/5-49	4-48/— —	12-48/— —
	MR2	7-48/9-50	7-48/11-49	— — — —	7-46/— —	— — — —	11-45/— —	4-47/3-49
	MR3	— — — —	— — — —	— — — —	— — — —	1-49/— —	— — — —	4-49/— —
	MRFN/FA	— — — —	— — — —	4-48/— —	— — — —	— — — —	5-48/— —	4-48/— —
Boilerman	BTC	6-48/— —	7-40/7-48	6-46/— —	3-45/5-47	10-37/7-42	3-47/2-49	6-47/— —
	BT1	6-42/10-42	4-41/6-42	2-41/7-42	11-40/1-42	12-40/1-42	7-41/8-42	2-41/4-42
	BT2	10-46/1-47	8-46/1-47	9-46/9-47	11-46/5-47	11-42/8-46	10-45/4-47	11-46/11-47
	BT3	7-48/9-48	1-48/4-48	12-47/1-48	12-47/5-48	1-48/4-48	1-48/4-48	10-47/5-48
	BTFN/FA	— — — —	— — — —	4-48/— —	— — — —	— — — —	— — — —	7-50/— —
Electrician's Mate	EMC	— — — —	3-37/— —	3-50/— —	4-50/— —	8-34/8-46	5-38/8-48	6-46/7-49
	EM1	6-46/1-47	2-46/2-47	11-42/11-46	11-40/9-48	11-42/12-47	6-46/6-47	9-42/12-47
	EM2	— — — —	6-49/— —	11-48/— —	— — — —	9-50/— —	1-48/10-48	3-48/9-48
	EM3	1-49/— —	2-48/— —	8-44/— —	— — — —	2-49/10-50	2-48/7-50	8-44/— —
	EMFN/FA	8-49/— —	— — — —	9-48/— —	— — — —	— — — —	— — — —	9-48/— —
I. C. Electrician	ICC	6-44/— —	11-43/— —	— — — —	5-42/— —	5-42/6-50	8-46/— —	11-43/— —
	IC1	7-43/— —	— — — —	— — — —	6-46/— —	12-46/— —	7-47/— —	— — — —
	IC2	3-49/— —	1-49/8-50	1-49/9-50	6-49/— —	1-48/— —	3-50/— —	8-50/— —
	IC3	— — — —	— — — —	— — — —	— — — —	1-49/— —	— — — —	— — — —
	ICFN/FA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Metalsmith	MEC	4-47/— —	10-45/— —	— — — —	10-45/— —	6-36/— —	3-47/— —	12-48/— —
	ME1	4-44/10-45	3-44/3-46	5-46/6-47	1-46/3-48	7-40/6-46	9-42/6-46	8-44/9-46
	ME2	9-44/2-48	2-48/7-50	4-48/4-49	10-48/— —	10-47/10-48	9-47/8-48	9-44/7-48
	ME3	8-48/9-50	2-48/10-49	1-48/12-48	8-49/11-50	1-49/10-50	8-47/10-50	8-47/9-49
	MEFN/FA	7-48/— —	7-48/— —	3-48/— —	3-48/— —	— — — —	— — — —	— — — —
Pipe Fitter	FPC	— — — —	8-41/— —	— — — —	— — — —	8-41/12-49	1-50/— —	— — — —
	FP1	6-47/4-48	5-42/1-47	8-46/3-47	3-47/2-48	3-46/4-47	9-46 4-47	2-46/6-47
	FP2	10-48/11-50	3-46/7-48	12-44/7-48	2-48/2-49	8-46/2-48	7-47/7-48	2-47/6-48
	FP3	6-47/— —	6-47/6-50	— — — —	— — — —	4-51/— —	— — — —	— — — —
	FPFN/FA	— — — —	— — — —	— — — —	— — — —	— — — —	11-47/— —	— — — —

COM-11	COM-12	COM-13	PRNC	SRNC	CNATRA	CNATE	ANYWHERE U. S.	RATE
10-48/— —	4-48/— —	— — — —	— — — —	— — — —	— — — —	— — — —	10-48/— —	SH3 (Cobbler)
— — — —	12-47/— —	12-47/— —	— — — —	— — — —	— — — —	— — — —	3-50/— —	SH3 (Barber)
— — — —	— — — —	— — — —	— — — —	— — — —	4-50/— —	— — — —	— — — —	SH3 (Tailor)
7-48/11-48	11-48/6-50	— — — —	12-47/12-48	— — — —	8-47/5-48	9-46/— —	4-48/6-48	SH3 (Laundry)
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	SHSN/SA (St.)
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	SHSN/SA (Cob.)
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	SHSN/SA (Bar.)
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	SHSN/SA (Tail.)
3-48/11-49	6-48/— —	7-48/— —	— — — —	— — — —	10-49/— —	2-48/— —	2-46/7-48	SHSN/SA (Lau.)
— — — —	— — — —	— — — —	— — — —	— — — —	10-51/— —	— — — —	— — — —	JOC
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	JO1
— — — —	— — — —	— — — —	— — — —	— — — —	8-50/— —	— — — —	— — — —	JO2
— — — —	— — — —	— — — —	— — — —	— — — —	2-52/— —	— — — —	— — — —	JO3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	JOSN/SA
— — — —	12-46/— —	— — — —	1-50/— —	— — — —	— — — —	— — — —	1-52/— —	PIC
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	12-49/— —	PI1
— — — —	— — — —	9-50/— —	— — — —	— — — —	— — — —	— — — —	12-47/2-51	PI2
— — — —	3-49/— —	— — — —	7-50/— —	— — — —	— — — —	— — — —	7-49/— —	PI3
— — — —	— — — —	— — — —	1-51/— —	— — — —	10-50/— —	— — — —	10-50/— —	PISN/SA
4-52/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	LIC
— — — —	— — — —	— — — —	6-48/— —	— — — —	— — — —	— — — —	6-48/— —	LI1
— — — —	— — — —	— — — —	— — — —	— — — —	8-50/— —	— — — —	— — — —	LI2
— — — —	— — — —	— — — —	2-52/— —	— — — —	— — — —	— — — —	5-48/— —	LI3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	LISN/SA
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	DMC
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	DM1
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	DM2
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	DM3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	DMSN/SA
11-35/8-41	6-44/7-46	6-45/7-46	12-46/6-48	7-49/4-50	7-37/12-45	— — — —	11-42/9-44	MMC
2-44/8-44	6-44/1-46	3-44/11-44	12-43/3-46	5-45/8-47	3-45/7-45	— — — —	12-43/6-44	MM1
12-46/9-47	4-46/8-47	8-44/9-47	9-47/3-48	4-48/7-49	4-46/3-47	— — — —	8-44/2-47	MM2
— — — —	1-49/— —	— — — —	— — — —	— — — —	8-48/3-49	— — — —	5-48/9-49	MM3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	MMFN/FA
12-35/10-47	1-38/11-48	11-35/9-49	— — — —	— — — —	5-42/4-50	— — — —	12-42/2-50	ENC
6-46/10-47	10-47/— —	9-44/9-47	1-48/— —	2-48/— —	11-43/6-45	2-48/— —	7-47/1-48	EN1
7-50/— —	— — — —	— — — —	— — — —	8-50/— —	9-47/1-48	— — — —	2-49/— —	EN2
12-47/— —	— — — —	— — — —	10-51/— —	— — — —	12-46/10-48	— — — —	— — — —	EN3
2-45/— —	2-45/— —	9-46/— —	— — — —	— — — —	— — — —	— — — —	9-46/— —	ENFN/FA
9-39/— —	9-39/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	MRC
12-45/5-47	2-48/— —	— — — —	— — — —	— — — —	— — — —	— — — —	7-43/1-49	MR1
11-43/11-47	11-45/6-48	8-47/— —	— — — —	— — — —	5-48/— —	— — — —	4-47/1-49	MR2
1-50/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	MR3
12-49/— —	— — — —	— — — —	— — — —	— — — —	2-51/— —	— — — —	5-48/— —	MRFN/FA
11-38/1-44	11-42/3-47	6-39/9-49	11-48/— —	10-49/— —	11-47/2-49	— — — —	6-39/10-47	BTC
3-41/2-42	3-41/6-42	2-42/6-42	5-42/1-48	10-40/3-48	1-42/8-42	12-47/— —	3-41/3-42	BT1
5-47/6-47	6-47/9-47	2-45/10-47	9-47/3-48	— — — —	12-44/10-47	— — — —	10-45/1-47	BT2
8-47/5-48	12-47/6-48	7-46/9-48	12-47/2-49	— — — —	6-48/1-49	— — — —	12-47/1-48	BT3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	BTFN/FA
8-40/3-48	3-37/1-43	1-43/7-49	1-50/— —	— — — —	6-41/— —	— — — —	5-38/1-50	EMC
9-42/3-45	8-45/8-47	1-42/7-47	9-47/2-48	5-48/— —	12-43/6-48	— — — —	11-42/2-47	EM1
4-48/— —	5-46/— —	10-48/— —	— — — —	— — — —	1-48/2-49	— — — —	— — — —	EM2
11-50/— —	— — — —	— — — —	4-50/— —	— — — —	10-48/10-50	— — — —	7-50/— —	EM3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	EMFN/FA
6-48/— —	— — — —	8-46/— —	— — — —	— — — —	— — — —	— — — —	11-43/— —	ICC
— — — —	— — — —	— — — —	11-48/— —	6-46/— —	— — — —	— — — —	6-46/— —	IC1
6-49/— —	— — — —	— — — —	4-49/— —	— — — —	— — — —	— — — —	1-49/6-49	IC2
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	IC3
8-49/— —	— — — —	8-49/— —	— — — —	— — — —	— — — —	— — — —	— — — —	ICFN/FA
9-39/4-47	5-45/6-50	9-39/6-50	1-49/— —	— — — —	— — — —	— — — —	9-39/2-49	MEC
2-41/9-43	3-43/10-44	2-41/3-48	1-46/3-48	6-43/9-48	9-46/5-47	— — — —	9-42/5-46	ME1
4-48/7-48	5-48/10-48	6-46/9-50	2-50/— —	— — — —	6-46/12-47	— — — —	3-47/5-48	ME2
8-47/8-50	10-47/2-49	2-46/6-48	8-47/— —	— — — —	2-48/9-50	— — — —	11-47/2-49	ME3
3-48/— —	— — — —	— — — —	— — — —	— — — —	3-48/— —	— — — —	3-48/— —	MEFN/FA
4-43/12-47	12-47/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	FPC
11-46/10-47	9-47/1-49	7-47/— —	— — — —	— — — —	2-46/4-47	— — — —	3-46/1-47	FP1
2-48/8-48	2-48/8-48	4-48/— —	2-48/— —	3-48/— —	— — — —	— — — —	4-48/7-48	FP2
10-47/— —	10-47/— —	— — — —	1-49/— —	— — — —	9-47/— —	— — — —	10-47/— —	FP3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	FPFN/FA

BuPers Shore Duty Eligibility List (cont.)

	RATE	COM-1	COM-3	COM-4	COM-5	COM-6	COM-8	COM-9
Damage Controlman 	DCC	— — — —	— — — —	12-47/— —	2-49/— —	2-49/— —	3-50/— —	— — — —
	DC1	11-48/2-50	4-49/3-50	11-48/12-49	2-50/— —	5-49/7-49	10-46/1-50	10-46/6-49
	DC2	8-48/— —	9-50/— —	2-48/2-51	— — — —	8-50/— —	7-48/1-49	— — — —
	DC3	— — — —	5-48/— —	3-48/— —	12-48/— —	— — — —	— — — —	— — — —
	DCFN/FA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Patternmaker 	PMC	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	PM1	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	PM2	— — — —	— — — —	— — — —	12-47/— —	— — — —	— — — —	— — — —
	PM3	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	PMFN/FA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Molder 	MLC	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	11-46/— —
	ML1	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	ML2	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	ML3	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	MLFN/FA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Surveyor 	SVC	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	SV1	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	SV2	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	SV3	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	SVCN/CP	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Construction Electrician's Mate 	CEC	1-51/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	CE1	4-52/— —	— — — —	11-50/— —	— — — —	— — — —	— — — —	— — — —
	CE2	— — — —	— — — —	— — — —	— — — —	7-51/— —	— — — —	— — — —
	CE3	11-51/— —	— — — —	— — — —	— — — —	11-50/— —	— — — —	— — — —
	CECN/CP	— — — —	5-51/— —	— — — —	— — — —	5-51/— —	— — — —	2-52/— —
Driver 	CDC	9-46/— —	— — — —	— — — —	— — — —	— — — —	— — — —	1-51/— —
	CD1	3-51/— —	— — — —	10-42/— —	— — — —	7-49/2-51	— — — —	4-49/— —
	CD2	11-51/— —	— — — —	6-51/— —	3-51/— —	— — — —	— — — —	— — — —
	CD3	5-51/— —	— — — —	7-51/— —	5-51/2-52	3-51/2-52	6-48/10-51	8-48/12-51
	CDCN/CP	— — — —	— — — —	2-52/— —	— — — —	8-51/— —	9-51/— —	8-51/— —
Mechanic 	CMC	— — — —	— — — —	— — — —	— — — —	7-50/— —	— — — —	4-50/— —
	CM1	10-46/— —	— — — —	— — — —	12-51/— —	12-51/— —	— — — —	— — — —
	CM2	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	CM3	8-51/— —	— — — —	— — — —	2-52/— —	2-52/— —	— — — —	— — — —
	CMCN/CP	— — — —	— — — —	— — — —	1-51/— —	— — — —	— — — —	— — — —
Builder 	BUC	2-45/— —	— — — —	— — — —	— — — —	10-50/— —	— — — —	— — — —
	BU1	3-50/10-50	— — — —	— — — —	1-48/3-51	7-47/3-50	— — — —	4-51/— —
	BU2	3-51/— —	— — — —	— — — —	9-47/— —	— — — —	— — — —	— — — —
	BU3	4-51/7-51	— — — —	— — — —	— — — —	12-50/— —	— — — —	1-51/— —
	BUCN/CP	— — — —	— — — —	— — — —	— — — —	12-49/— —	— — — —	— — — —
Steelworker 	SWC	6-48/— —	— — — —	— — — —	7-47/3-52	— — — —	— — — —	9-39/— —
	SW1	2-51/— —	— — — —	— — — —	5-48/— —	5-48/2-51	— — — —	— — — —
	SW2	7-50/— —	— — — —	— — — —	9-49/— —	— — — —	— — — —	— — — —
	SW3	5-51/— —	— — — —	— — — —	— — — —	9-51/— —	— — — —	2-51/— —
	SWCN/CP	1-52/— —	— — — —	— — — —	— — — —	— — — —	— — — —	1-52/— —
Utilities Man 	UTC	11-46/— —	— — — —	— — — —	— — — —	4-51/— —	— — — —	— — — —
	UT1	11-50/— —	— — — —	— — — —	2-51/— —	10-51/— —	— — — —	— — — —
	UT2	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	UT3	11-48/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	UTCN/CP	— — — —	— — — —	— — — —	— — — —	3-52/— —	— — — —	— — — —
Steward 	SDC	— — — —	4-47/— —	4-47/2-51	— — — —	6-49/— —	— — — —	10-47/— —
	SD1	10-41/5-50	12-45/2-48	12-39/12-45	6-47/2-50	6-47/7-49	11-46/9-50	4-46/7-50
	SD2	3-44/1-47	2-38/5-44	2-38/11-45	2-46/12-47	3-44/10-48	1-46/5-49	11-46/10-48
	SD3	4-46/9-50	7-44/12-45	4-46/5-46	5-46/8-50	7-49/8-50	7-44/1-47	3-45/11-48
	TN/TA	10-50/— —	9-46/3-51	2-50/6-51	9-46/1-52	9-46/8-51	8-49/10-51	9-45/2-52
Aviation Machinist's Mate 	ADC	4-46/4-49	4-50/3-51	10-49/4-50	6-49/3-51	1-47/8-48	7-50/— —	4-50/7-50
	AD1	1-49/11-50	10-48/6-49	10-48/6-49	7-48/12-51	11-47/1-51	1-51/— —	7-50/2-52
	AD2	— — — —	6-49/9-51	7-48/10-48	12-50/— —	3-49/11-51	— — — —	— — — —
	AD3	— — — —	2-49/— —	4-43/2-52	— — — —	— — — —	— — — —	— — — —
	ADAN/AA	10-49/2-52	— — — —	11-51/— —	— — — —	1-51/— —	— — — —	— — — —
Aviation Electronics Technician 	ATC	3 39/10-51	6-47/— —	2-52/— —	12-51/— —	5-51/2-52	2-52/— —	6-47/— —
	AT1	5-48/4-50	3-49/12-51	5-49/2-52	2-52/— —	6-44/12-48	3-50/10-51	— — — —
	AT2	— — — —	— — — —	— — — —	— — — —	12-51/— —	— — — —	— — — —
	AT3	— — — —	— — — —	11-51/— —	— — — —	— — — —	— — — —	— — — —
	ATAN/AA	— — — —	— — — —	— — — —	— — — —	7-50/— —	— — — —	— — — —
Aviation Electronicsman 	ALC	11-41/7-46	7-43/2-48	7-43/6-47	8-46/— —	7-43/8-46	8-47/6-48	1-47/6-48
	AL1	10-46/9-48	3-50/3-52	11-46/12-47	2-48/7-50	9-49/7-50	3-50/3-51	— — — —
	AL2	2-47/3-50	— — — —	— — — —	10-51/— —	4-52/— —	8-50/— —	— — — —
	AL3	8-49/— —	— — — —	8-50/— —	8-49/— —	— — — —	— — — —	— — — —
	ALAN/AA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Aviation Ordnanceman 	AOC	4-40/11-47	— — — —	2-41/9-47	4-48/12-49	2-37/12-43	10-47/1-49	12-43/2-49
	AO1	12-41/1-47	— — — —	7-46/5-48	12-48/3-51	12-41/3-43	7-47/8-48	— — — —
	AO2	4-43/5-46	— — — —	2-48/7-49	9-50/— —	2-45/5-47	4-49/— —	— — — —
	AO3	3-48/11-50	— — — —	2-47/— —	— — — —	— — — —	4-49/— —	— — — —
	AOAN/AA	— — — —	— — — —	12-51/— —	— — — —	6-51/— —	— — — —	— — — —

COM-11	COM-12	COM-13	PRNC	SRNC	CNATRA	CNATE	ANYWHERE U. S.	RATE
5-49/6-50	6-50/— —	5-49/6-50	— — — —	— — — —	— — — —	— — — —	— — — —	DCC
10-46/2-50	8-49/3-50	7-48/3-50	1-43/6-49	8-46/4-50	5-46/5-49	— — — —	4-49/7-49	DC1
7-48/— —	— — — —	— — — —	— — — —	— — — —	2-48/1-51	— — — —	8-50/— —	DC2
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	DC3
— — — —	— — — —	3-48/— —	— — — —	— — — —	— — — —	— — — —	— — — —	DCFN/FA
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	PMC
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	PM1
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	PM2
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	PM3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	PMFN/FA
3-48/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	MLC
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	2-48/— —	ML1
11-50/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	ML2
7-48/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	ML3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	MLFN/FA
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	SVC
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	SV1
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	SV2
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	SV3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	SVCN/CP
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	1-51/— —	CEC
5-47/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	CE1
— — — —	— — — —	— — — —	— — — —	— — — —	8-51/— —	— — — —	— — — —	CE2
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	12-51/— —	CE3
— — — —	— — — —	8-50/— —	— — — —	— — — —	— — — —	— — — —	— — — —	CECN/CP
11-50/11-51	11-50/6-51	11-50/— —	1-51/— —	— — — —	12-51/— —	— — — —	11-50/— —	CDC
10-50/3-51	10-50/— —	2-51/— —	1-48/1-52	— — — —	7-49/3-51	— — — —	7-49/3-51	CD1
1-51/— —	4-51/— —	3-50/— —	— — — —	— — — —	11-50/— —	— — — —	1-51/— —	CD2
10-51/12-51	12-50/2-52	12-50/11-51	— — — —	— — — —	6-48/1-51	— — — —	5-51/12-51	CD3
8-48/— —	8-48/— —	11-50/— —	— — — —	— — — —	3-51/— —	— — — —	8-48/4-52	CDCN/CP
1-52/— —	1-52/— —	— — — —	— — — —	— — — —	4-50/— —	— — — —	7-51/— —	CMC
— — — —	— — — —	— — — —	6-42/— —	— — — —	3-51/— —	— — — —	5-51/— —	CM1
— — — —	— — — —	— — — —	— — — —	— — — —	6-51/— —	— — — —	6-51/— —	CM2
7-51/— —	— — — —	7-50/— —	3-51/— —	— — — —	— — — —	— — — —	6-51/— —	CM3
3-51/— —	3-51/— —	— — — —	— — — —	— — — —	5-51/— —	— — — —	3-51/3-52	CMCN/CP
10-51/— —	4-51/— —	— — — —	— — — —	— — — —	10-50/— —	— — — —	10-50/11-51	BUC
7-48/1-52	— — — —	— — — —	11-49/— —	— — — —	4-49/3-51	— — — —	7-47/3-50	BU1
6-51/1-52	— — — —	4-50/— —	— — — —	— — — —	— — — —	— — — —	4-50/1-52	BU2
4-52/— —	— — — —	3-52/— —	— — — —	— — — —	1-51/6-51	— — — —	4-52/— —	BU3
— — — —	— — — —	2-51/— —	— — — —	— — — —	— — — —	— — — —	— — — —	BUCN/CP
12-44/3-47	3-46/— —	— — — —	— — — —	— — — —	9-39/1-47	— — — —	9-39/1-47	SWC
2-51/— —	2-51/— —	— — — —	— — — —	— — — —	1-49/— —	— — — —	1-49/2-51	SW1
3-48/— —	10-50/— —	— — — —	— — — —	— — — —	8-48/— —	— — — —	7-50/4-51	SW2
12-51/— —	— — — —	— — — —	— — — —	— — — —	8-50/9-51	— — — —	5-51/1-52	SW3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	1-52/— —	SWCN/CP
— — — —	— — — —	— — — —	— — — —	— — — —	5-49/— —	— — — —	4-51/— —	UTC
1-52/— —	— — — —	— — — —	— — — —	— — — —	2-51/— —	— — — —	12-50/1-52	UT1
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	UT2
— — — —	— — — —	— — — —	— — — —	— — — —	2-51/— —	— — — —	2-52/— —	UT3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	UTCN/CP
5-23/11-38	9-38/1-51	— — — —	— — — —	— — — —	11-38/— —	— — — —	6-49/— —	SDC
4-38/1-39	7-38/1-39	10-43/3-50	7-49/7-50	10-50/— —	12-39/8-50	10-46/10-51	10-43/8-49	SD1
6-40/4-45	6-40/10-45	10-45/12-49	4-45/4-48	12-47/12-50	11-46/10-48	7-50/— —	3-41/1-47	SD2
8-45/6-46	10-44/6-45	11-44/3-46	8-45/5-46	9-48/8-49	7-44/4-46	8-46/1-51	3-46/11-49	SD3
4-46/6-51	3-48/8-51	9-45/— —	— — — —	— — — —	3-48/2-50	12-48/— —	9-45/8-51	TN/TA
9-46/7-47	9-46/7-50	8-43/12-46	1-40/1-51	1-51/8-51	7-47/8-49	2-50/1-51	10-47/3-51	ADC
11-47/12-49	11-47/10-51	7-43/8-45	1-52/3-52	9-51/12-51	7-49/1-51	10-42/3-52	1-52/4-52	AD1
10-46/— —	4-43/1-51	9-41/9-49	1-52/— —	9-51/— —	6-48/8-49	— — — —	10-47/4-52	AD2
12-51/— —	— — — —	11-48/1-51	4-52/— —	— — — —	10-50/3-52	2-49/— —	10-50/— —	AD3
8-50/— —	— — — —	10-48/1-52	— — — —	— — — —	8-50/11-51	— — — —	8-51/— —	ADAN/AA
10-35/12-47	12-43/11-49	10-42/9-48	1-52/— —	— — — —	6-47/10-51	— — — —	6-51/— —	ATC
9-50/3-51	9-48/10-50	9-48/7-49	12-48/11-51	— — — —	6-44/7-49	2-52/— —	2-51/10-51	AT1
— — — —	— — — —	3-48/— —	— — — —	— — — —	10-48/— —	3-48/— —	12-51/— —	AT2
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	AT3
9-49/— —	— — — —	3-49/— —	— — — —	— — — —	7-50/— —	— — — —	— — — —	ATAN/AA
12-39/12-47	12-39/4-44	— — — —	8-43/7-47	3-51/— —	9-45/8-47	7-43/2-48	8-47/7-48	ALC
10-43/3-48	12-42/12-48	9-41/8-49	9-48/10-50	8-49/— —	3-48/3-50	10-49/— —	10-43/5-50	AL1
8-48/— —	8-44/8-48	4-48/2-51	10-51/— —	— — — —	8-50/4-52	11-49/— —	4-52/— —	AL2
— — — —	1-52/— —	11-48/— —	— — — —	— — — —	8-50/— —	10-51/— —	— — — —	AL3
5-51/— —	12-47/— —	12-47/— —	— — — —	— — — —	— — — —	— — — —	— — — —	ALAN/AA
12-43/5-46	10-35/7-47	9-41/7-48	10-40/10-49	3-51/— —	6-42/5-47	7-36/1-52	9-48/3-49	AOC
11-47/5-48	1-48/4-48	10-45/4-48	7-46/6-48	— — — —	7-43/5-46	7-48/3-51	7-47/7-48	AO1
10-50/8-51	12-48/7-50	2-48/3-49	10-48/— —	— — — —	2-45/3-48	2-48/2-52	11-49/12-51	AO2
— — — —	— — — —	3-51/— —	4-48/— —	1-52/— —	12-51/3-52	2-51/— —	— — — —	AO3
— — — —	— — — —	— — — —	11-50/— —	— — — —	6-51/— —	12-51/— —	— — — —	AOAN/AA

BuPers Shore Duty Eligibility List (cont.)

	RATE	COM-1	COM-3	COM-4	COM-5	COM-6	COM-8	COM-9
Air Controlman	ACC	1-52/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	AC1	9-51/— —	— — — —	— — — —	— — — —	5-52/— —	— — — —	— — — —
	AC2	— — — —	— — — —	7-52/— —	— — — —	— — — —	— — — —	— — — —
	AC3	3-52/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	ACAN/AA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Aviation Boatswain's Mate	ABC	2-51/— —	— — — —	7-50/10-51	3-40/— —	9-51/— —	— — — —	— — — —
	AB1	3-47/10-51	— — — —	11-49/5-50	4-44/8-51	4-44/7-50	— — — —	— — — —
	AB2	2-51/— —	9-49/3-52	9-48/— —	11-47/— —	7-49/11-50	— — — —	— — — —
	AB3	9-48 4-51	— — — —	12-48/— —	12-48/— —	11-47/— —	— — — —	— — — —
	ABAN/AA	2-51/— —	— — — —	6-48/— —	— — — —	8-50/— —	— — — —	— — — —
Aviation Electrician's Mate	AEC	7-46/— —	— — — —	4-49/7-50	— — — —	7-50/— —	— — — —	3-51/— —
	AE1	12-48/1-51	— — — —	12-48/9-51	10-51/— —	10-47/3-51	4-51/2-52	— — — —
	AE2	11-50/— —	— — — —	11-50/— —	— — — —	3-51/— —	3-51/— —	— — — —
	AE3	— — — —	— — — —	4-48/— —	— — — —	— — — —	— — — —	— — — —
	AEAN/AA	12-51 — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Aviation Structural Mechanic	AMC	3-51/— —	3-51/— —	5-47/10-51	2-38/3-51	2-42/2-49	5-46/— —	2-42/3-51
	AM1	8-49/2-51	11-47/7-50	2-49/8-51	2-49/12-51	11-47/1-49	9-49/1-52	— — — —
	AM2	11-51/— —	7-48/— —	— — — —	— — — —	9-51/— —	9-51/— —	— — — —
	AM3	11-47/— —	— — — —	12-51/— —	— — — —	4-47/— —	— — — —	— — — —
	AMAN/AA	10-51/— —	10-51/— —	— — — —	— — — —	2-47/5-52	3-52/— —	— — — —
Parachute Rigger	PRC	10-40/ — —	— — — —	— — — —	— — — —	— — — —	— — — —	1-52/— —
	PR1	7-51/— —	— — — —	2-50/8-51	— — — —	1-50/10-50	5-47/10-51	— — — —
	PR2	5-51/— —	— — — —	1-48/— —	— — — —	— — — —	— — — —	— — — —
	PR3	1-52/— —	— — — —	7-51/— —	— — — —	— — — —	— — — —	— — — —
	PRAN/AA	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
Aviation Storekeeper	AKC	— — — —	— — — —	— — — —	5-49/— —	1-52/— —	12-50/— —	12-50/— —
	AK1	4-48/— —	8-51/— —	3-51/— —	3-48/1-52	3-48/10-51	3-48/10-51	— — — —
	AK2	— — — —	— — — —	8-51/— —	— — — —	10-50/— —	10-50/— —	— — — —
	AK3	— — — —	— — — —	— — — —	— — — —	— — — —	1-52/— —	— — — —
	AKAN/AA	— — — —	— — — —	— — — —	1-51/— —	3-52/— —	— — — —	— — — —
Aviation Photographer's Mate	AFC	7-49/— —	— — — —	6-50/— —	— — — —	8-50/— —	1-51/— —	— — — —
	AF1	10-47/— —	7-50/— —	1-51/— —	— — — —	2-47/4-50	2-47/2-51	1-51/— —
	AF2	8-51/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —
	AF3	2-51/— —	— — — —	— — — —	— — — —	— — — —	8-51/— —	8-51/— —
	AFAN/AA	5-51/— —	— — — —	— — — —	— — — —	1-51/— —	5-51/— —	10-48/— —

Round-Up of New Legislative Action Under Consideration Of Interest to Naval Personnel

Here is the latest roundup of legislation of interest to naval personnel to come out of the second session of the 83rd Congress.

The summary, as usual, includes new bills introduced as well as changes in status of other bills previously introduced and reported in this section. The following list relates Congressional action taken during the month since the last roundup.

Further information on legislation pertaining to the Navy and naval personnel will be carried in forthcoming issues as action is taken.

Warrant Officers—Public Law 379 (evolving from H. R. 6374); establishes a career program for warrant officer promotion and retirement similar to the program now offered commissioned officers. The law eliminates many of the discrepancies under current regulations and organizes the warrant programs of all the armed services on the same basis, prescribing uniform time-in-grade requirements for promotion, instituting a selection system for promotion, revising and consolidating regulations for retirement or discharge (with severance pay if passed over and not reenlisted) and setting the mandatory retirement age at 62.

Foreign Decorations — Public Law 354 (evolving from H. R. 6051 and S. 2247); provides that members of the U. S. armed forces may be authorized by their respective service secretaries to accept from certain allied governments' decorations, orders and emblems which may be tendered them for Korean service.

Defense Appropriations — H. R. 8873: passed by the House; allots somewhat more than $28 billion for defense expenditures by the armed forces during the fiscal year of 1955.

"If I get it any cleaner they'll have me charged with wearing out government property."

Homestead Benefits — S. 1823: passed by the Senate; would allow the same benefits to Korean veterans allowed to World War II veterans in connection with priority for homestead rights.

Ship Restoration — H. R. 8247: passed by the House; would provide for the restoration and maintenance of the frigate *Constitution* and for the disposition by sale, grant or other means of USS *Constellation*, USS *Hartford*, USS *Olympia* and USS *Oregon*.

Academy Appointments — H. R. 4231: passed by the Senate with amendments; would increase the number of appointments to the military and naval academies from the "U. S. at large" and would specify that these added appointments be allotted to sons of individuals who died as the result of active service in the armed forces in World War I, World War II and the Korean conflict.

Service Secretaries — S. 3466: introduced; would provide for two additional assistant secretaries each for the Army, Navy and Air Force. One of the new assistant secretaries of the Navy would be designated as

COM-11	COM-12	COM-13	PRNC	SRNC	CNATRA	CNATE	ANYWHERE U. S.	RATE
— — — —	5-52/— —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	ACC
— — — —	— — — —	7-52/— —	— — — —	— — — —	10-51/— —	— — — —	5-52/— —	AC1
— — — —	3-52/— —	8-51/9-52	— — — —	— — — —	— — — —	— — — —	7-52/— —	AC2
— — — —	— — — —	7-52/— —	— — — —	— — — —	7-51/— —	— — — —	7-52/— —	AC3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	ACAN/AA
1-51/— —	5-48/4-52	— — — —	— — — —	7-50/— —	9-51/3-52	2-51/— —	7-51/— —	ABC
3-46/12-49	3-46/6-50	6-50/1-51	8-50/10-51	— — — —	4-44/3-47	— — — —	11-49/7-50	AB1
— — — —	— — — —	— — — —	11-47/— —	— — — —	3-47/7-49	— — — —	— — — —	AB2
— — — —	— — — —	— — — —	— — — —	11-50/— —	11-47/2-51	12-48/— —	12-48/— —	AB3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	6-48/— —	ABAN/AA
7-50/9-50	6-48/7-51	— — — —	— — — —	— — — —	1-50/1-52	4-49/— —	— — — —	AEC
3-50/— —	7-49/2-51	3-51/— —	9-49/12-51	9-51/— —	3-50/4-51	10-51/— —	5-51/2-52	AE1
— — — —	— — — —	— — — —	— — — —	— — — —	3-51/— —	12-50/— —	— — — —	AE2
— — — —	— — — —	— — — —	— — — —	— — — —	10-51/— —	— — — —	— — — —	AE3
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	AEAN/AA
10-51/— —	10-51/— —	— — — —	1-52/— —	— — — —	2-42/3-51	— — — —	— — — —	AMC
7-51/— —	— — — —	8-47/9-49	12-51/— —	10-48/— —	11-47/9-49	3-51/2-52	1-52/— —	AM1
3-51/— —	— — — —	9-48/— —	7-48/— —	1-52/— —	9-51/— —	— — — —	— — — —	AM2
— — — —	— — — —	12-48/— —	4-49/— —	11-47/— —	4-47/2-52	— — — —	— — — —	AM3
— — — —	1-51/— —	1-51/— —	— — — —	— — — —	3-52/— —	— — — —	— — — —	AMAN/AA
— — — —	— — — —	— — — —	— — — —	— — — —	1-52/— —	1-50/— —	1-50/— —	PRC
5-47/10-49	5-48/7-50	— — — —	9-51/— —	— — — —	5-49/2-50	6-48/8-51	10-50/9-51	PR1
— — — —	— — — —	— — — —	3-51/— —	4-49/— —	5-43/12-51	— — — —	— — — —	PR2
— — — —	— — — —	— — — —	— — — —	— — — —	7-51/— —	— — — —	— — — —	PR3
— — — —	3-52/— —	— — — —	— — — —	— — — —	— — — —	10-51/— —	— — — —	PRAN/AA
11-45/— —	10-50/1-52	2-52/— —	— — — —	— — — —	12-50/7-51	— — — —	— — — —	AKC
1-51/— —	9-44/3-48	3-47/— —	1-52/— —	— — — —	2-48/1-49	8-51/— —	8-51/— —	AK1
— — — —	— — — —	2-52/— —	— — — —	— — — —	10-50/— —	— — — —	8-51/— —	AK2
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	AK3
— — — —	— — — —	— — — —	— — — —	2-52/— —	— — — —	— — — —	— — — —	AKAN/AA
5-49/2-51	— — — —	1-51/— —	— — — —	— — — —	8-50/— —	6-50/— —	— — — —	AFC
12-51/— —	— — — —	9-51/— —	7-46/— —	— — — —	2-47/1-52	7-50/— —	— — — —	AF1
— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	— — — —	AF2
— — — —	2-49/— —	— — — —	— — — —	— — — —	— — — —	— — — —	7-50/— —	AF3
— — — —	— — — —	9-51/— —	— — — —	— — — —	10-48/— —	1-51/— —	— — — —	AFAN/AA

Assistant Secretary of the Navy for Financial Management.

Antarctic Expedition — S. 3381 and H. R. 8954: introduced; would authorize the President of the U. S. to provide assistance to an expedition to the Antarctic being projected by the American Antarctic Association Inc., a non-profit organization.

Disability of Reservists — H. R. 9066: introduced; would provide appropriate hospitalization and medical care at Government expense for members of the Reserve components of the armed forces who might suffer injury, contract a disease or aggravate a pre-existing injury or disease in line of duty while on active duty, active duty for training, inactive duty for training or while in travel to or from such training.

Leave Earned While a POW — S. 3270: introduced; would provide that leave accrued by prisoners of war in Korea shall not be counted in determining the maximum amount of leave to which the individual may now be entitled. The bill would exempt such persons from certain provisions of the Armed Forces Leave Act of 1946.

Voting for Servicemen — H. R. 8917: introduced; recommends to the various states procedures that would simplify and expedite voting by men and women serving in the armed forces, and their families.

Re-enlistment Bonus — H. R. 9377 and S. 3539: introduced; would establish a new system of paying re-enlistment bonuses. The formula for figuring the amount of the bonus due would provide for a fraction of the Navyman's monthly basic pay to be multiplied by the number of years of his re-enlistment. The bonus would be largest for the first re-enlistment and would decrease for subsequent re-enlistments, ending entirely after 20 years service. Personnel would be given the option of taking their re-enlistment pay under the new bill or under the former regulations.

QUIZ AWEIGH ANSWERS

QUIZ AWEIGH **is on page 7**

1. **(c) Rescue chamber.**
2. **(b) Normal rescue capacity is 6, together with two operators, although in the rescue of crewmen of the sunken *Squalus* in 1939, as many as nine men (with two operators) were crowded into the device.**
3. **(c) Treble tackle block.**
4. **(a) Sister hook.**
5. **(b) F3H-1N.**
6. **(b) *Demon* Night Fighter.**

August Deadline Is Set for Submarine School Applications

One hundred and twenty naval officers have been selected for the July class at the Submarine School, New London, Conn.

The six-month submarine course is open to line officers of the Regular Navy and Naval Reserve on active duty whose date of rank as LTJG is 1 Jun 1952 or later or whose date of rank as ensign is prior to 1 Jan 1954.

Officers desiring to attend the next class scheduled to convene the first week of January 1955 must have completed at least one year of active commissioned service, be physically qualified and agree to remain on active duty during the course and for a period of at least one year after reporting to their first submarine.

Applications from eligible officers should be sent via commanding officer to the Chief of Naval Personnel (Attn: Pers-B1117), Washington 25, D. C. All applications should reach the Bureau of Naval Personnel before 20 Aug 1954. See BuPers Inst. 1520.6C of 15 Apr 1954.

Changes Made in Normal Tours Of Duty at Overseas Stations; Break-down Shows Time Needed

CHANGES IN THE NORMAL TOUR of overseas duty for enlisted personnel at various overseas stations and a break-down of the time needed on other overseas stations have been announcd.

"Overseas service" is defined as "duty performed ashore at naval activities beyond the continental limits of the U.S. and on board non-rotated naval vessels in the European and Asiatic areas."

To complete a normal tour, personnel must spend the prescribed time in the locality, exclusive of transit time to and from that particular spot. However, personnel transferred from one overseas area to another will be credited toward total obligated time with the time served in the first area.

Requests for extension of time will normally be granted at most of the overseas stations for a maximum of one year at the discretion of the administrative command if the forwarding endorsements indicate that such an extension would be in the best interest of the service and that the individual is psychologically and physically adapted to such an extension.

Naval personnel serving with other departments or agencies and who are subject to reassignment by those departments, have their lengths of overseas duty tour prescribed by the department concerned.

Overseas Naval activities not listed below have a normal tour of duty of 24 months.

It should be noted that these established tours of overseas service are considered merely as a guide for assignment of naval personnel to overseas duty stations. It is possible that there may be a variation from the prescribed tours of duty to meet special conditions such as frequency of ships' calling at certain overseas stations, or particular needs at that station.

Area	*Months of Overseas Tour*
Alaska-Aleutian Islands	
Adak	12; 18 if dependents are on station
*Attu, Dutch Harbor	
Point Barrow and Whittier	6 followed by rotation to more desirable station to complete 12 months in the area *If dependents are authorized to join personnel after rotation to more desirable station, tour completion date will be extended
Kodiak and Anchorage	12; 24 if dependents are on station
Azores Islands	18; 24 if dependents are on station
Eniwetok Atoll	6
Eleuthera, B.W.I.	12
Eritrea	18; 24 if dependents are on station
Formosa (MAAG)	18; 24 if dependents are on station
Germany	24, or 12 months *after* dependents arrive on station, whichever length of time is greater.
Greenland	9
Iceland	12; 24 if dependents are on station
Indo China (MAAG)	12; 24 if dependents are on station or 12 months after arrival of dependents, whichever is greater
Japan proper	24 or 12 months after dependents are on station whichever is greater
Kashmir (India)	12
Korea	12 followed by rotation to Japan to complete 24 months in the area
Korea (attaché)	18
Kwajalein	12; may be followed by rotation to Oahu to complete 24 months in area
Libya	12
Malta	12; 18 if dependents are on station or 12 months after arrival of dependents, whichever is greater
Marianas	
Chi Chi Jima	12
Guam, Saipan and Tinian	18
Okinawa	12; 18 if dependents are on station
Midway	12 followed by rotation to Oahu to complete 24 months in area
Morocco (Casablanca and Port Lyautey)	18; 24 if dependents are on station
Argentia	18
Persian Gulf area	12
Poland (attaché)	18
Red Sea Area	12
Ryukyu area	12
Saudi Arabia (Dharan)	12
Tripoli	18; 24 if dependents are on station
U.S.S.R. (attaché)	18
Non-rotated ships and staffs afloat in Asiatic area	15
Non-rotated ships and staffs afloat European area	18; 24 if dependents are on station

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.

Alnavs

No. 13 — Contains a farewell message from former Secretary of the Navy Robert B. Anderson, who becomes Deputy Secretary of Defense.

No. 14 — Contains greetings from the new Secretary of the Navy, Charles S. Thomas.

No. 15 — Congratulates the naval air arm on the 43rd anniversary of naval aviation.

No. 16 — Authorizes temporary additional duty orders for medical officers temporarily needed to assist in dependents' care at local naval hospitals and naval dispensaries.

No. 17 — Announces the convening of a selection board to recommend warrant officers on active and

inactive duty for temporary promotion to commissioned warrant grade, and commissioned warrant officers on active and inactive duty for advancement to pay grades W-3 and W-4.

BuPers Instructions

No. 1120.20 — Requests application from enlisted personnel on active duty for flight training in the naval aviation cadet (NavCad) program.

No. 1320.1B — Concerns accounting data to be included in preparing travel orders for enlisted personnel on full-time active duty.

No. 1440.13 — Gives instructions telling how career petty officers in Rating Group IX may be selected for the training necessary for them to qualify for change in rating to Aviation electronics technician (AT), aviation fire control technician (AQ) or aviation guided missileman (GF).

No. 1520.6C — Contains a list of 120 officers selected for the July 1954 class at the Submarine School, New London, Conn., and requests applications for the January 1955 class.

No. 5211.6A — Announces a new machine-processing accounting form (NavPers 576) for handling peacetime and wartime officer and enlisted allowances and complements.

BuPers Notices

No. 1430 (30 Apr 1954) — Lists those advanced to chief petty officer (acting appointment) as the result of the February 1954 exam.

No. 1221 (3 May 1954) — Deletes seven Special Program Codes and adds another to the *Manual of Navy Enlisted Classifications.*

No. 5510 (7 May 1954) — Raises to "Confidential" the classification of the training manuals *Fire Control Technician, Vol.* 1 (NavPers 10176) and *Naval Electronics, Part* 3 (NavPers 10810).

No. 1611 (12 May 1954) — Contains a list of 202 officers who originally came into the naval service from NROTC sources who have been selected for integration into the Regular Navy as permanent officers.

No. 1080 (13 May 1954) — Concerns improper entries made in the Personnel Diary (NavPers 501).

No. 5510 (13 May 1954) — Instructs commands how to downgrade certain training publications by deleting specified sections and thereby handle such publications as nonclassified.

No. 1426 (18 May 1954) — Lists names of those selected for appointment to the grade of ensign, USN, for limited duty only by the 1954 Limited Duty Officer selection board.

No. 1301 (24 May 1954)—Makes minor changes in BuPers Instruction 1301.6 (Change Two) which concerns Navy officers on temporary duty with the Army or Air Force.

No. 5510 (24 May 1954)—Gives instructions concerning a new loyalty form for use by the armed forces.

No. 1747 (25 May 1954)—Praises the work of the Navy Wives Club and gives permission to commanding officers to provide assistance and quarters to the organization where conditions permit.

Special Services Newsletter Has Info for ERS and SSOs

If you have recently been chosen to represent your division on the Enlisted Recreation Committee, you may not yet be familiar with some of the information available to assist you.

To help you in planning programs for your division, you should read the article on ERC that appeared in the June 1953 issue of ALL HANDS. In addition, you should see your Special Services officer, and arrange with him to read the monthly *Special Services Newsletter,* which is sent to each ship and station. Another valuable source of information, the *Special Services Manual,* is being revised and will be available in a few months.

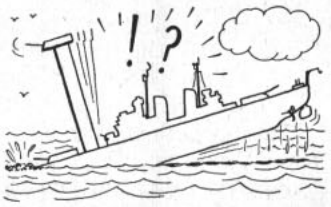
The *Newsletter* contains latest information on Navy recreation, ideas for intramural sports, hobbies, sightseeing trips, and other recreational notes. If your division has an idea that may be useful for another ship, you can send in the details to the Chief of Naval Personnel (Attn: Pers G-11) for inclusion in the *Special Services Newsletter.*

When your ship hits port, your ship's Special Services officer and members of the Enlisted Recreation Committee can obtain a great deal of information from the local shore-based Special Services officer. He can help arrange sightseeing tours, correlate a schedule to handle inter-ship challenges, give you info on the nearest gym, athletic field, golf course, etc.

HERE'S YOUR NAVY

Some ships like some people must watch their weight. But unlike people, ships are concerned with waterlines instead of waistlines.

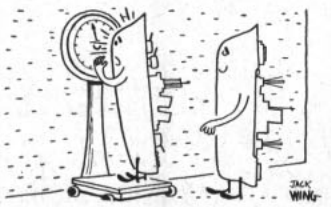
***Weight compensation* and *moment compensation* have come to have an important meaning to the Navy, particularly as a result of newly developed equipment which must be placed aboard the vessels of the Fleet. Briefly, *weight compensation* means that when one item is placed aboard ship something of equal weight must be removed. If too much weight is added**



without compensation, then the ship settles in the water and does not have sufficient "reserve buoyancy." (Reserve buoyancy is the volume of the watertight hull above the waterline). In case of damage below the waterline resulting in the flooding of several compartments, the ship could sink.

***Moment compensation* means controlling weight in such a way as to prevent the ship's center of gravity from rising. If the center of gravity rises, stability is reduced and danger of capsizing increases.**

Weight and moment compensations sometimes conflict. For example, you want to mount a gun up high to improve its arc of fire, but if you do,



then ballast must be added at the keel to maintain stabiliy (moment compensation). However, now you have changed the weight compensation, so the draft accordingly increases. In most combatant vessels the simple solution of adding ballast to maintain the desired center of gravity cannot be used because such action would reduce reserve buoyancy. Accordingly, controlling weight of a high-placed gun, would necessitate removal of corresponding weight at near the same height and yet not conflict with weight compensation.

BOOKS: LOTS OF GOOD, NEW VOLUMES HEADED FOR NAVY LIBRARIES

THE ACCENT IS on history this month, with some fine volumes ranging from the period of the Revolutionary War to the Korean conflict. Here are reviews of some of the latest books chosen for Navy libraries by the BuPers library staff:

• ***V-2,*** by Walter Dornberger; The Viking Press.

The advent of the atomic age almost eclipsed the development of the famed V-2 rockets—the "most awesome and fearful weapon" used against the Allies in World War II.

Conflicting reports concerning the birth of the V-2 rocket have been plentiful both during and since the war. Now, Dr. Dornberger, the scientist who directed Peenemund, the German experimental rocket station, has come up with an authentic account of the V-2's development from 1930 to 1945.

On a practically "invisible budget," Dornberger and his aids worked long and hard to produce a long-range liquid-fuel rocket. After a number of failures, the A-4 (later called the V-2) was successfully launched on 3 Oct 1942. It broke the sonic barrier. A new and powerful weapon was within reach. All sorts of areas were opened up by the event—including the possibility of space travel. Had the V-2 been perfected earlier, the author states, World War II undoubtedly would have been prolonged.

This book tells not only of the struggle to perfect the rocket but it gives a clear picture of Nazi Germany at work—a picture of personal jealousies, battles for priorities, civilian greed and military rivalry.

★ ★ ★

• ***Cavalry of the Sky,*** by Lynn Montross; Harper and Brothers.

Amphibious warfare, as successfully used in World War II, has been continuously adapted and improved to meet the changing conditions brought about by new weapons of the atomic era. In a foreword to this book, General Lemuel C. Shepherd, Jr., USMC, Commandant of the Marine Corps, stated that the Corps "realized that the devastating effects of atomic weapons called for new landing force procedures and equipment to replace those which had won so many decisive victories in World War II. As the solution, the Marine Corps committed itself to new amphibious tactics of dispersion made possible by the troop-carrying helicopter and vertical landings."

During the Korean conflict, as a result of this forethought and planning, the helicopter emerged as an important tactical innovation, proving its worth in other phases of war operations as well as in amphibious operations. It was used for reconnaissance, wire-laying, rescue work, evacuation of casualties and a multitude of other chores. It lifted an infantry battalion. In many instances, it provided the only contact between units separated by enemy action.

Montross' book tells the story of the progress of the whirlybirds. An avid researcher, the author has spent much time going over documents, interviewing the right people, checking and rechecking, in an effort to cover the story as accurately and as completely as possible. He has used wisely the wealth of material at his disposal.

★ ★ ★

• ***Lights Across the Delaware,*** by David Taylor; J. B. Lippincott Company.

The Battle of Trenton during the American Revolutionary War has long been overshadowed in history text books by accounts of Yorktown and the defeat of the cream of the British army.

Trenton was an important battle, however, not only from a strictly military point of view but from the all-important morale standpoint. It marked the end of a series of disheartening "retreats" on the part of Washington's troops.

This volume is a fictionalized account of events leading up to the battle and of the battle itself.

Chief characters are Phoebe Runnels, a Rebel lass who is in love with Wheeler Smith, a young Quaker whose religion keeps him from joining the America army. Phoebe has acted as nurse and cook for American soldiers while her teen-age brother, Sam, has been working with the Rebel forces as a courier.

As the story unfolds, the reader gets frequent glimpses of Washington, Hamilton, Greene and other American leaders as they map out their strategy and plan the defeat of the Hessian mercenaries at "Trent's Town."

★ ★ ★

• ***The Recapture of Guam,*** by Major Orlan R. Lodge, USMC; U. S. Government Printing Office.

This is the twelfth of a series of USMC historical monographs on World War II, designed to give both "the military student and the casual reader" an accurate and detailed account of the Corps' activities. Eventually, these monographs will be integrated into a final "Operational History of the Marine Corps in World War II."

The present volume covers the planning and preparations for the recapture of Guam, progressing through the W-Day landing and on to final "mopping-up" activities.

Purple Heart veterans of the Guam campaign may obtain free copies of the new monograph by writing to the Commandant of the Marine Corps (Code AO3D), Headquarters, Marine Corps, Washington 25, D. C.

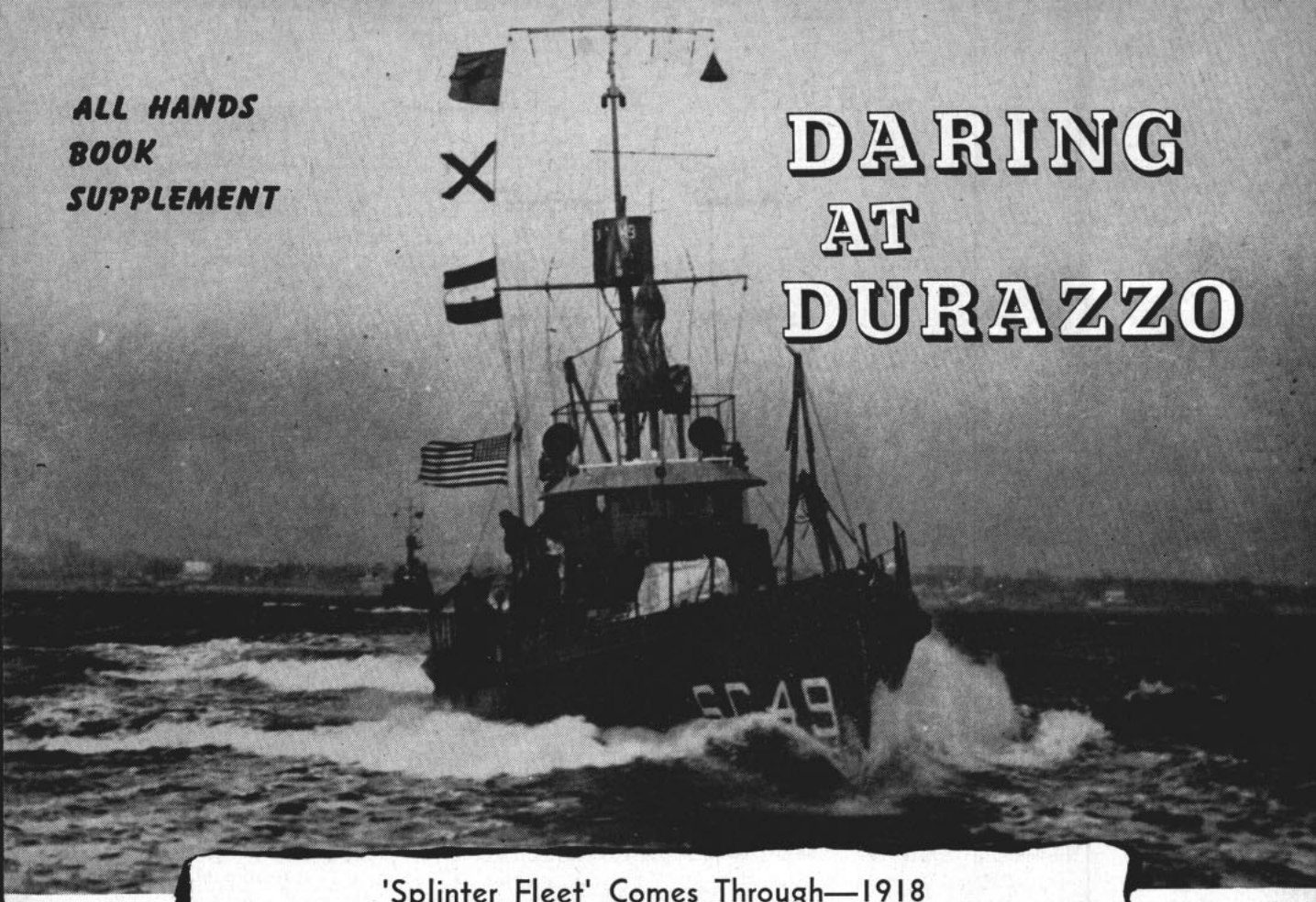
SONGS OF THE SEA

Rolling Home

Up aloft amid the rigging,
Swiftly blows the fav'ring gale,
Strong as springtime in its blossom
Filling out each bellying sail;
And the waves we leave behind us,
Seem to murmur as they rise;
We have tarried here to bear you
To the land you dearly prize.
Rolling home, rolling home, rolling home across the sea;
Rolling home to fair Columbia, rolling home, dear land, to thee.

—Old Naval Song

DARING AT DURAZZO



'Splinter Fleet' Comes Through—1918

Into the teeth of the enemy fire rode the U. S. sub chasers, ducking enemy shellfire, dodging mines, evading torpedoes, to get a ringside seat and watch fascinated as the Allied fleet blasted the enemy port city into smoking ruins.

Although the word "Durazzo" is little recalled today, it bulked large in the minds of Allied naval planners of World War I. For it was from the naval base at Durazzo, Albania, that enemy submarines sortied to prey upon vital Allied shipping moving through the Mediterranean.

In an attempt to bottle up these undersea hornets in their nest in the Adriatic, the Allies had laid a series of minefields in the narrow reach between the heel of the Italian "boot" and the mainland of Greece (see chart), a so-called "barrage" similar to the one thrown up for the same purpose in the North Sea ("Bottling Up The U-boats," ALL HANDS, March 1953, p. 59).

This barrage had been partly—but not fully—successful. Now, in the closing months of the war, the Allies conceived a bolder stroke: Move in with a superior naval force and destroy the port.

By doing this, they hoped to accomplish two things: (1) Sever the U-boats from their home base, and (2) neutralize the defenses of Durazzo so that Allied troops could pour through this gateway to the Balkans and attack a vital spot in the tottering Austro-Hungarian Empire.

This was the grand strategy; making it pay off was up to the men who manned the British, French, Italian and U. S. ships making the attack. To the men of the U. S. Submarine Chaser 225, *for example, the job narrowed down to this: blast a path with depth charges through the minefield surrounding the harbor so the big ships could edge in close, and secondly, destroy any enemy submarines that come out to do battle with the attack fleet.*

Quite an order! How well these fragile "Splinter Boats," as they were affectionately called, accomplished it is told here in his own words by an eyewitness, Chief Petty Officer Ray Milholland who served as chief engineer of the "225."

This is how it felt to ride one of these craft into the face of the enemy fire—and remain there—as shells whistled overhead, torpedoes whizzed by and submarines prowled menacingly nearby.

WAR AND BATTLE are not synonymous terms, most works of fiction, and histories for that matter, to the contrary. I do not hesitate to state my opinion that, if war was all a continuous battle, wars would be very short indeed. And the explanation is simple: human flesh can stand just so much drain on the physical and emotional fountains within a man. That is why official communiques during the late war refer, again and again, to the replacement of "spent divisions" on the battle front with "fresh troops."

I know from experience that the physical exertion a man expends during a battle is not nearly so great as

From The Splinter Fleet and the Otranto Barrage by Ray Milholland; The Bobbs-Merrill Co., Indianapolis and New York; 1936. Reprinted with permission of the copyright owner.

SUB CHASER goes on convoy duty during World War I.

pick and shovel work performed for a similar number of hours. It is the unimaginable tension and counter-tension of the emotions within a man, from the time he starts into battle until he is out of it, either dead on the ground or dead on his feet, that make a gaunt, staggering skeleton of him in such an amazingly short space of time.

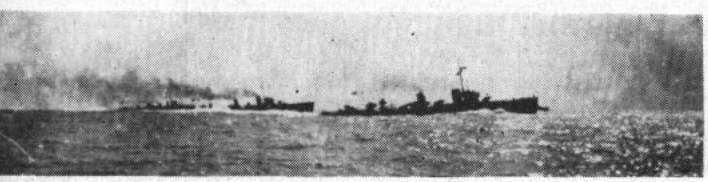
I also have found very little in books to explain what military leaders mean by "fresh troops" going into battle and sweeping the enemy before them with dash and vigor. Are they fresh troops in the sense that they are lighthearted, full of energy—loving life to the full? Hardly. Such men are too comfortable in body and spirit to fight savagely. That, too, I know, because I have experienced it.

No, a man fights best when he has been cold, and wet, and hungry, and has been driven from one grinding routine task to another for days and weeks—driven until nothing but the pit stone of his soul is left and bitter gall is dripping from it. And then he is ready to go into battle!

And so it was with us of the Splinter Fleet toward the end of September in 1918. Months, months, months of the same round of bully beef and hardtack until the very thought of the next meal was gagging. Then there was the ceaseless heave and roll of the splinter boats. In just a comfortable sailing breeze, a splinter boat tosses and lurches erratically. One tries to sleep by lying flat on the stomach, arms outstretched and legs spread-eagled, to keep from rolling out of a wet and greasy bunk.

Water and dampness are everywhere. Combined with the nerve-racking roll and pitch is the constant vapor of salt spray and spent exhaust gases belching from the engine ports. If the wind is on the starboard beam, that retching mist blows back aboard; if it comes from port or from dead ahead it looks likewise. The after quarters, where the engine-room crew is supposed to sleep, get the full effect of it from all three engine ports, and a following wind blows it down into the engine-room again, over the bridge and into the charthouse, down into the fo-castle. At no time at sea—and we spent most of our time there—was the reek of gasoline and salt spray any better than just endurable.

BRITISH destroyers turn their firepower on Durazzo.



However, we only noticed how bad the condition was when it became necessary to replace a man who had died from the deadly flu epidemic that kept day and night shifts working ashore to make coffins.

We of the Splinter Fleet carried on short-handed, standing watch four hours, resting four hours, and going back on watch again like red-eyed automatons.

The morning of October 1, 1918, our splinter boat, in company with eleven others, came steaming through the tortuous labyrinth of mined nets which protected the Italian naval base of Brindisi.

Naturally, as soon as we had tied up to the docks, we anticipated going ashore for a few hours of welcome liberty; for while we knew that something unusual was in the wind, not even McCloud, our skipper, knew where we were headed. But shore liberty was denied. Instead, we set about overhauling the engines—something we always did every time they could be stopped for even a few minutes—inspecting the recoil mechanism of the three-inch gun, making sure the Y-Gun depth-mine projector was in perfect working order.

A few minutes later, Captain Nelson [Captain Charles P. Nelson, USN, Submarine Chaser Force Commander] called all splinter boat commanders over to the "95," his flagship. All twelve of them crowded below with him in the tiny cabin and remained there until long after dark.

Some hours later, McCloud, commanding officer of our chaser, returned from that conference and called the Chief Boatswain's Mate and me down to his quarters. I can remember yet how stiffly his lips moved as he started speaking:

"What I'm going to say to you men must not be repeated. Understand?" We both nodded without speaking, and our skipper continued. "Tomorrow morning we're going into a big scrap. It's big—toughest we've ever faced together. On our three pairs of shoulders rests the responsibility of carrying out the job assigned to this ship.

"I can't tell you where we're going. I'd like to but I'm not permitted. But where we are going . . ." McCloud clamped his lips shut and stared first at one of us, then the other. "Where we're going is going to take guts. Because we are not expected to come out. We're a *suicide fleet*—slam right through the enemy's mine fields and smash their subs in their own harbor. Our job is to get in and do that—and get out if we can."

I left McCloud's cabin with a lump of ice that wouldn't melt in the pit of my stomach. I am not ashamed to say that war had long ago lost its fascination. Right then I would have been very willing indeed to have been in a much safer situation; but I know I had to set an example for my engine-room crew, and went about my duties like an automaton.

We slipped out of Brindisi [see map] at midnight, creeping through the mine-net channel, knowing that the slightest error in blind navigation would send us roaring skyward in a fog of splinters—we were never to

be allowed to forget we were the Splinter Fleet, it seemed.

For the rest of the night we ran at reduced speed in a general easterly direction, indicating that our objective was not very far off. And shortly after dawn headlands loomed up out of the midst. It was Durazzo!

We went into action at once, every chaser padded in her crew's mattresses, which had been rigged around the bridge and charterhouse as splinter mats. The decks had been sanded to prevent the gun crew's bare feet from slipping in their own blood later—every man stood at his battle station, his bronzed bare shoulders gleaming in the cold morning light. No man spoke an unnecessary word. Any cheering? Any display of devil-may-care heroism as we raced toward the enemy fortress's guns under full engine power? No. there was nothing like that—just one of the quartermasters high up on our slender steel mast, lashing our largest ensign to the masthead with copper wire—the Navy traditionally goes into battle with its largest flag flying from the main truck. There was to be no striking of colors in the coming battle.

Undoubtedly we caught the Austrians completely by surprise. Not a shell was fired at us from the formidable shore batteries until we had already commenced our allotted work of countermining their extensive mine fields by dumping our own depth mines over the stern.

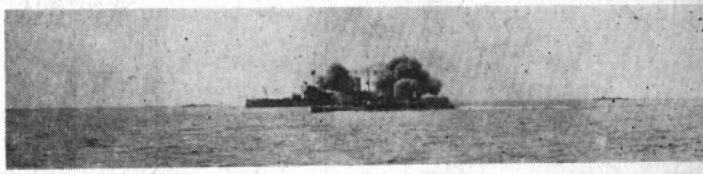
The first depth mine rolled off. Down in the engine-room I heard the metallic clank of the steel launching cradle as it went overboard. Then five . . . ten seconds went by—eternity—then, *Crunch!* The deck plates of the engine-room bounced and danced crazily as the vibrations from first the depth mine, and then the countermined Austrian mines, wrenched and tore at our thin-skinned hull. The next depth mine concussion loosened every electrical switch in the engine-room circuits.

Instantly all three main engines died. And in that first blood-chilling second of silence, I heard the clank of the depth-mine launching gear—another mine had been dropped over our stern! It takes full speed ahead for a chaser to get clear of her own exploding depth mines, and here we were drifting slower and slower, still over the very crater of the impending explosion. A man thinks fast when a second means life or death.

There was no time to peer over the brink of eternity. We raced about, madly slapping switches back into place and securing them with short pieces of tarred yarn. The propeller shafts, still rotating slowly from the forward motion of our chaser, carried the pistons over compression to meet the renewed spark in the ignition system. Our engines roared full throttle once more after only a moment's pause which had seemed like hours, but our own depth mine had caught us on the outer rim of its erupting center. The fragile wooden hull wreathed under us like a wounded thing, but raced on.

While I was making a hurried inspection of all holds to see whether the explosion had opened any seams, I flung a look back over the tossing waste of the Adriatic toward Brindisi. Nowhere on the horizon was there any sign of the Allied Battle Fleet which was to follow us and bombard the Austrian fortresses. We continued to bomb, keeping a sharp eye out to intercept any submarines which might rush out to torpedo the expected battleships.

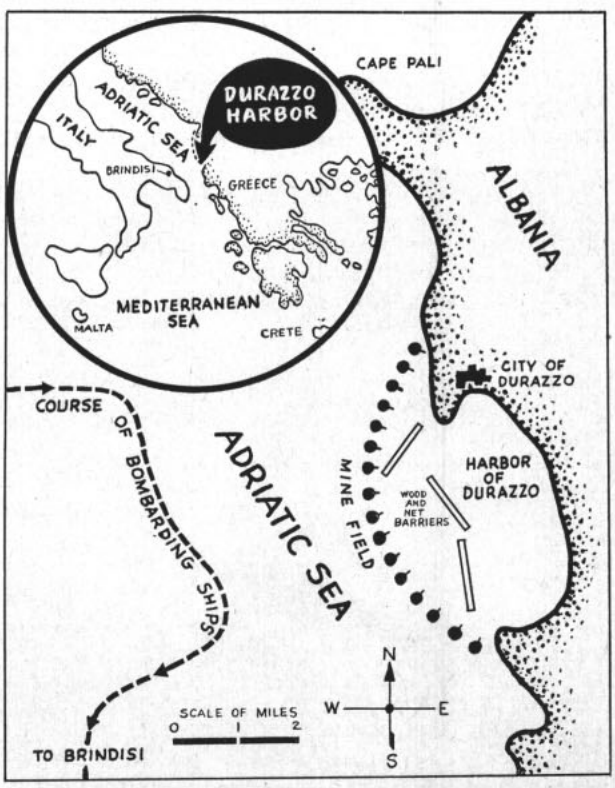
Then the Austrians began firing tentative range-finding shots from their ten-inch shore batteries at us. But they still seemed puzzled. Perhaps they thought our eleven splinter boats were indulging in a foolhardy raid and that we could be picked leisurely—just a little special target practice at accommodating live targets. Meanwhile, we zigzagged rapidly to avoid the shells dropping into the sea around us and flinging up graceful plumes of water.



BOMBARDMENT is kept up by cruisers from Italian navy.

The arriving shells rumbled overhead like freight trains passing over a long bridge. The air vibrated and the vibration could be felt in one's stomach like the deep bass notes of a great pipe organ. A sense of the unrealness of it all settled over me. The roar of the distant guns had reached a volume that produced a weird delusion of no sound at all.

Splash! A big shell dropped close aboard. Then another: one over, and one short; then one almost dead aboard—they had our range and speed bracketed to a hair. But we dove off at a sharp angle from the course we were on and continued dropping depth mines methodically. Each time we released a mine, a half-dozen enemy mines exploded in our wake—countermined, some; some were observation mines touched off from the fire-control station ashore in an attempt to catch us on one of those deadly squares of the mine chart. The savagery of the fire increased. We were doing too



DURAZZO Harbor's strategic location is shown by chart.

JOB WELL DONE—Squadron of SCs awaits orders home.

nice a job of countermining their first line of defense.

I took a turn around my engine-room, feeling every bearing with my hands and checking the flow of cooling water through the dancing exhaust-valve stems. The engines were pounding and banging from over-speed, but they were standing up to their job. The atmosphere in the engine-room was thick with a rising cloud of burnt oil and gases, blown down by the churning pistons.

Then on deck again for a quick inspection of our remaining supply of gasoline in the service tanks. We were burning a hundred gallons of fuel an hour. There was enough left in the tanks to carry us along at racing speed for eight hours more. I reported this to McCloud and turned back to the engine-room.

A slim gray enemy destroyer came streaking out of Durazzo and swung her knife-like bows straight at us, her two bow-chaser guns flashing and pitching shells around us.

Our forward three-inch gun coughed back at her with a sound like the piping chirp of a young robin in all the diapason of sound. The destroyer swept on, sheering off at sufficient angle to bring her starboard battery to bear on us and make a quick finish of it. Our silly little stub-nose gun continued to reply. A burst of brown smoke rolled up from the oncoming destroyer's stern—a lucky hit by some Yank gun pointer of the Splinter Fleet, direct on her steering gear. But she kept on shelling us just the same while her crew strove frantically to rig a hand steering gear.

ON THE WAYS—Sub chaser '54' is readied for battle.

Just then something flashed past our stern in a smother of spray, heading straight for the disabled enemy destroyer. At first, I thought it was a torpedo fired by one of the British destroyer flotilla which had appeared out of nowhere behind us. I looked again. This time I saw four such smothers spray—Italian motor *scafas,* the strange little water beetles which the Austrians had learned to dread. This was the first time I had seen these tiny torpedo craft in action. They swept on at a dizzy speed—forty knots it appeared—diving clean into a wave and bulleting out the other side. They were just tiny hulls crammed with engines. Sixteen hundred horsepower of American-built gasoline motors drove their forty-foot hulls at terrific speed.

The motor *scafa* nearest the Austrian destroyer suddenly pitched to a stop and swung her bow dead amidships on the Austrian. A gunner in the tiny cockpit leaned over and yanked at a lever . . . Fascinated, I watched the streaks of her two eighteen-inch torpedoes dart straight for the Austrian. There was a terrific explosion, boilers flew skyward, spinning like pinwheels, with jets of steam still spurting from them. Then the smother of water and flying debris settled back on the water. The destroyer had vanished.

The rumble of heavy shells passing overhead increased in an unbelievable crescendo. I found myself continually pulling my cap down and having it creep up again—vibration! By this time the avalanche of steel was coming from seaward and hurtling into Durazzo. The Allied Battle Fleet had finally arrived on the line and was steaming, single file, eight thousand yards offshore and firing salvo after salvo. I watched the Italian battleship, *San Giorgio,* fire a full salvo of her main batteries at a transport in Durazzo harbor. Without a preliminary ranging shot, the whole salvo smashed into the transport. There was a boiling cloud of rust and high explosive smoke—when the wind cleared it away, the transport was gone.

The destructive fire of the Allied Battle Fleet continued. It was appalling to watch the defenses and works of Durazzo crumbling under the continual pounding of the Allied shells. And, added to this destruction, came flight after flight of Italian, French, and British bombing planes. Seventy-four of them came over, flying in detached groups of a "V" formation, like enormous geese. And as each flight passed over Durazzo, it dropped its tons of bombs. The air was filled continuously with flying debris. Even the following flights of planes bounced and pitched in the billows of air that vomited up from the explosions beneath; but they would circle back and drop their bombs, too—relentless and deadly.

Then the little Italian *scafas* went flashing straight into the thick of shell-dotted Durazzo harbor. When they came to the great steel boom of floating cylinders chained across the mouth of the harbor, they chose the lowest floating barrier and leaped clear over it! It was breath-taking to watch them strike the boom with their upraised bows and go sailing over, like antelopes clearing a sage bush. It was this ability to hurdle the harbor booms that had earned for them the Austrian nickname of "sea tanks." They had done the same thing at Pola on three separate occasions, racing in under the cover of a black rain-swept night, firing their torpedoes into some

unsuspecting Austrian battleships, and dashing out safely again.

Now they were streaking across the harbor in a perfect hail of fire. A big floating drydock was struck by two Italian torpedoes; it heeled over drunkenly and sank. Another ship went down. The water gate of a drydock was smashed and the sea poured in, drowning a submarine under repair. Apparently their work was done, for they started out to sea again. Three of them raced up to the boom, leaping it as cleanly as before. But one motor *scafa* continued to cruise around inside the harbor, like a duck with a wounded wing. It almost lay over on its side. We were close enough in to see her torpedo man struggling to release her last torpedo which had jammed in the launching gear.

Just then the other three motor *scafas* discovered that one of their number was in difficulty. They whirled about and leaped over the boom again and came back to stand by their comrade! It was a perfectly useless gesture, but somehow the sight of it thrilled me. Back they had come into a perfect sleet of shellfire concentrated on the cripple. There was nothing they could do but take her crew off, if they could survive after presenting such easy targets to the shore gunners.

Momentarily, I expected them all to be smashed to bits. But they circled round, decoying the shore fire to themselves, while their crippled companion worked to release the torpedo from his port side. This had caused his craft to careen to such an extent that jumping the boom was impossible. At last a streak shot away from her—the last torpedo had sped and she righted herself. Then all four raced for the boom and leaped it as gaily as dancers!

It would have been utterly impossible for one pair of eyes, with many other duties pressing, to see all that happened during that battle. And I do not recall all that I saw in those brief moments when I could raise my head from the engine-room hatch to snatch a breath of fresh air.

Our own splinter boat continued her submarine patrol, standing in, within fifteen hundred yards of the southernmost Austrian ten-inch batteries, and scanning the harbor exits for submarines working out to torpedo the Allied Battle Fleet, then circling farther out to make sure that none had slipped through, unnoticed.

It was one of those outward swings, as we guarded the flank of the British cruiser *Weymouth,* that we sighted the feather of a submarine's periscope.

We opened fire at once. Our shell tore away at her main periscope while she swung her forward torpedo tubes on the big British cruiser. As the torpedo shot away, the sub's bows leaped from the water.

We stabbed another shell into her, and with two other splinter boats raced at her as she crash dived. Too late—our combined depth mine attack caught her squarely under her keel, amidships.

We raced back through the noisome scum of oil and litter and dropped a few more depth mines—just to make sure. In the midst of the floating oil, I saw a U-boat sailor, encased in a lifejacket. A wave rolled oven—then there was nothing there but the collapsed lifejacket.

Not far away another submarine bombing attack was going on. As I snatched a brief look, the sea erupted: in the middle of a roaring crater, the entire hull of a submarine came shooting up, spinning like a spindle of wood flung from a woodworker's lathe.

A terrific explosion flung huge pieces of steel plate in all directions, one fragment screaming over us, to fall and skitter crazily across the water before it finally dived under.

Hour after hour the Austrian shore batteries fought a hopeless duel with the Allied Battle Fleet. But their mine fields had proved ineffective; their reliance on their submarine defense against bombarding battleships vanished under a barrage of depth mines. One by one, the main batteries leaped into the air and fell silent, after an arriving salvo from the sea had exploded under them.

But still both sides continued to hurl shells at each other. One little side show happened almost exclusively for my eyes, when a British destroyer of the *Camelion* class swept past, between us and a shore batery which had our range almost dead on the line. As the destroyer raced by, I saw a shell intended for us cut another neat porthole in her fo'castle plates, as accurately spaced with the others, and as nearly on the same line, as if it had been done in a shipyard. The shell passed through the boat without exploding—nobody was hurt.

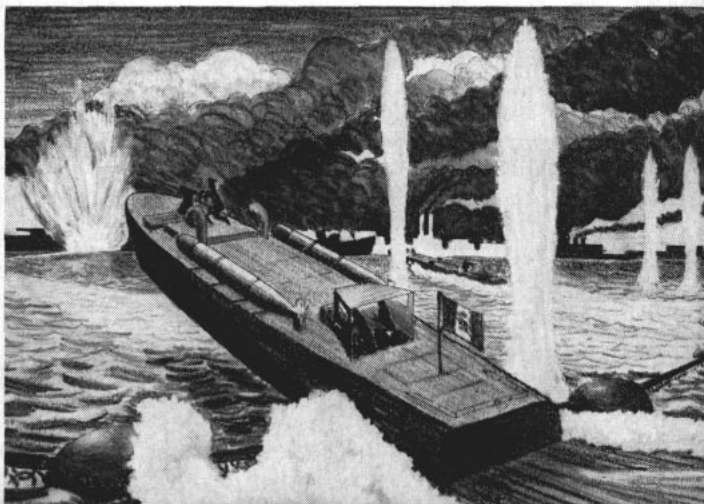
In strange contrast was the deadly accuracy of the Allied Battle Fleet's gunnery as compared to the erratic fire from the equally powerful Austrian shore batteries. The Austrians did not register a single hit fatal to a ship during the entire engagement! The Allied fire completely destroyed Durazzo, hardly a single stone standing in its original place after the battle was over. The destruction of human life ashore was appalling.

Casualties of the Allied Fleet, including eleven splinter boats which did not receive a single direct hit throughout the entire engagement, amounted to less than six men killed and a mere handful of wounded. Every Allied ship, including the *Weymouth,* which had been struck by one torpedo in her false stern but kept on fighting, returned to Brindisi under its own power after the battle was over.

The following submarine chasers of the American Splinter Fleet took an active part in the battle of Durazzo on October 2, 1918: 215, 128, 129, 338, 179, 95 324, 130, 337, 327, 225.

Victory was complete and crushing. A few days after Durazzo, impregnable fortress of the Adriatic, was reduced to a smoking shambles, the entire rehabilitated Serbian Army was landed there. That put a strong Allied Army in the rear of the Austrians and Bulgarians fighting on the Santi Quaranta and Salonika fronts. It was the beginning of the end.

ITALIAN motor 'scafa' crashes through enemy defenses.



TAFFRAIL TALK

A good record for the conduct of its personnel has been posted by the cruiser USS *Columbus* (CA 74). Her commanding officer handed out a cool 100 Good Conduct Medals to men currently serving in the big ship. Four men were getting the award for the second time.

★ ★ ★

News filters in from all over. We have just heard about a regulation bunch of cattle out on Saipan. The Navy is running a cattle farm there to improve the native stock. The breeds

which the Navy has decided will thrive on the island have had a distinctive brand slapped on their flanks. It reads, "U. S. Navy."

★ ★ ★

From down Memphis, Tenn., way comes the story of how a local automobile agency has turned over one of its cars to the Naval Air Station Safety Office for use in the Station's annual "Learn to Drive" campaign.

It marks the fourth year the firm has done this.

Station personnel and dependents who have passed their 16th birthday are eligible for the driver-trainer program. The course is conducted by experienced drivers from the Transportation Division. Each lesson is 40 minutes long and students continue until they successfully pass the state driver's test. Lessons are given twice weekly. The average driver needs about 10 lessons to feel at home behind the wheel.

A service charge of 50 cents is made for gas and oil, but the company bears all other costs, including liability insurance.

Strikes us as a pretty fine idea all around.

★ ★ ★

Three Navy and two Army officers got a surprise when they were called out to investigate a suspicious-looking object that had washed ashore near Oakland, Calif. Approaching the object, they found it to be a big can filled with something that appeared greasy and mushy—much like a certain type of high explosive. They took no chances.

The troubleshooters cleared the beach for a mile to the north and a mile to the south, and then placed an explosive charge under the can with all the care they would have given a floating mine.

Then they set it off.! Baa-loo-om . . . Plop! Instead of the expected reaction from the "high explosive," a fountain of greasy white arched into the air, cascading back to earth in a great heap. The "suspicious object" was a can of lard!

The All Hands Staff

ALL HANDS

THE BuPERS INFORMATION BULLETIN

With approval of the Bureau of the Budget on 17 June 1952, this magazine is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor.

PERSONAL COPIES: This magazine is for sale by Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.: 20 cents per copy; subscription price $2.25 a year, domestic (including FPO and APO addresses for overseas mail); $3.00, foreign. Remittances should be made direct to the Superintendent of Documents. Subscriptions are accepted for one year only.

Distribution: By Section B-3203 of the Bureau of Naval Personnel Manual the Bureau directs that appropriate steps be taken to insure that all hands have quick and convenient access to this magazine, and indicates that distribution should be effected on the basis of one copy for each 10 officers and enlisted personnel to accomplish the purpose of the magazine.

In most instances, the circulation of the magazine has been established in accordance with complement and on-board count statistics in the Bureau, on the basis of one copy for each 10 officers and enlisted personnel. Because intra-activity shifts affect the Bureau's statistics, and because organization of some activities may require more copies than normally indicated to effect thorough distribution to all hands, the Bureau invites requests for additional copies as necessary to comply with the basic directive. This magazine is intended for all hands and commanding officers should take necessary steps to make it available accordingly.

The Bureau should be kept informed of changes in the numbers of copies required; requests received by the 20th of the month can be effected with the succeeding issues.

The Bureau should also be advised if the full number of copies is not received regularly.

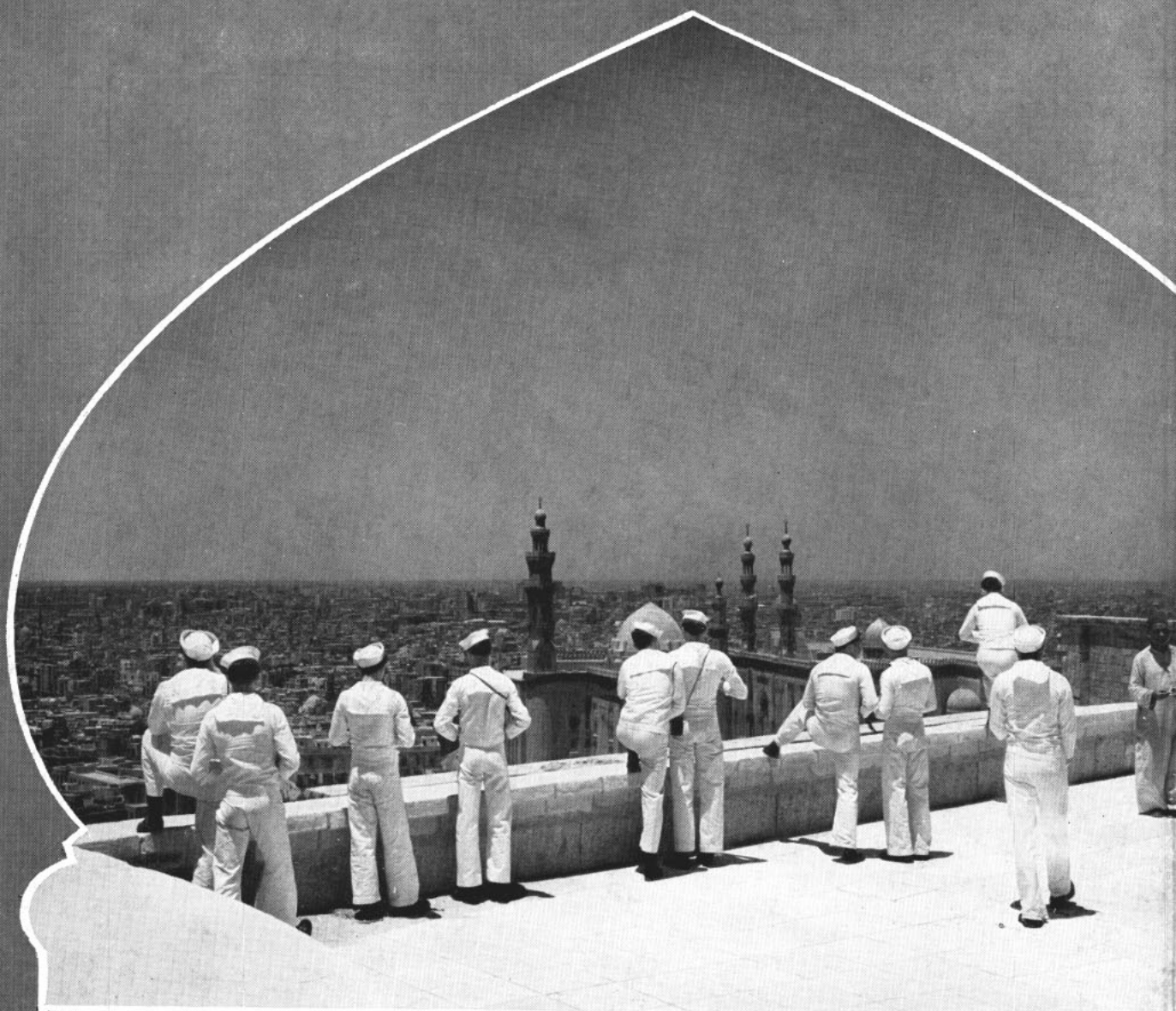
Normally, copies for Navy activities are distributed only to those on the Standard Navy Distribution List in the expectation that such activities will make further distribution as necessary; where special circumstances warrant sending direct to sub-activities, the Bureau should be informed.

Distribution to Marine Corps personnel is effected by the Commandant, U. S. Marine Corps. Requests from Marine Corps activities should be addressed to the Commandant.

REFERENCES made to issues of ALL HANDS prior to the June 1945 issue apply to this magazine under its former name, The Bureau of Naval Personnel Information Bulletin. The letters "NDB" used as a reference, indicate the official Navy Department Bulletin.

• AT RIGHT: TWO NAVYMEN—members of the ship's 'black gang'—work on shaft in the engine room of *USS Firedrake* (AE 14).

WIDE HORIZONS



- seeing new places
- meeting new people
- learning on the job